Kaleido-X User's Manual

Ver. 2.00

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Title	Kaleido-X User's Manual
Part Number	770-20M05-100
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This equipment complies with:

- CAN/CSA C22.2 No. 950-95 / Safety of Information Technology Equipment, Including Electrical Business Equipment.
- UL Std. No. 1950, 3rd Ed. / Safety of Information Technology Equipment, Including Electrical Business Equipment.
- EN 60950:1992 (2nd edition) Incorporating A1, A2, A3, A4, and A11/ Safety of Information Technology Equipment, Including Electrical Business Equipment.

CAUTION

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel. Servicing should be done in a static-free environment.

Electromagnetic Compatibility

This equipment has been tested for verification of compliance with FCC Part 15, Subpart B, class A requirements for Digital Devices.

This equipment complies with the requirements of:

- EN 55022 Class A, Electromagnetic Emissions,
- EN 61000-3-2 & -3-3, Disturbance in Supply Systems
- EN 61000-4-2, -3, -4, -5, -6, -8 & -11 Electromagnetic Immunity

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1 Overview

Welcome to the Kaleido-X! This section provides information about the system overview

documentation set and customer support.

Summary

About this Document *1*
Kaleido-X System Overview *4*
Detailed Directions *5*
Customer Support *24*

About this Document

The Kaleido-X user's manual is intended for the user to fully utilize the working potential of the KX hardware and XEdit applications for controlling and monitoring audio, video broadcast signal path for interfacing, routing distribution and other third party devices.

The Kaleido-X hardware and software is designed and produced by Miranda Technologies Inc.

Documentation Conventions

This documentation may use the following documentation conventions.

Notation	Usage	Example
RMB click	Click with the rightmost mouse button.	RMB click the group and choose **Ungroup** from the menu that appears.
Shift+click	Press the Shift key an simultaneously click with the leftmost mouse button.	Click on a file, then Shift+click another file to select a range of files.
Ctrl+click	Press the Ctrl key and simultaneously click with the leftmost mouse button.	Click on the first file and then Ctrl+click each additional file you want to include in the selection.
Italic	A folder or file path.	*\winnt\system32*
Bold	Kaleido commands within paragraphs of text.	Click **OK.** **doform()**

`Courier`	iControl script.	`if(ge(&current.line,&current.lpp))`
		`  doform()`
		`  clearpage()`
		`endif()`

Vertical bar	Separates menu commands.	Choose **File** | **Open**.

XEdit Application Shortcuts

The following is a list of shortcut keys that an XEdit user can selects to force specific actions to be executed.

Action Description	Shortcut Key
Restore factory resolutions	Ctrl Shift E
Restore factory audioscale	Ctrl Shift A
Toggle grid	Ctrl Shift G
Toggle Tips panel presence	Ctrl Shift H
Restore factory Widget Libraries	Ctrl Shift L
Toggle Property panel presence	Ctrl Shift P
Toggle Navigator presence	Ctrl Shift N

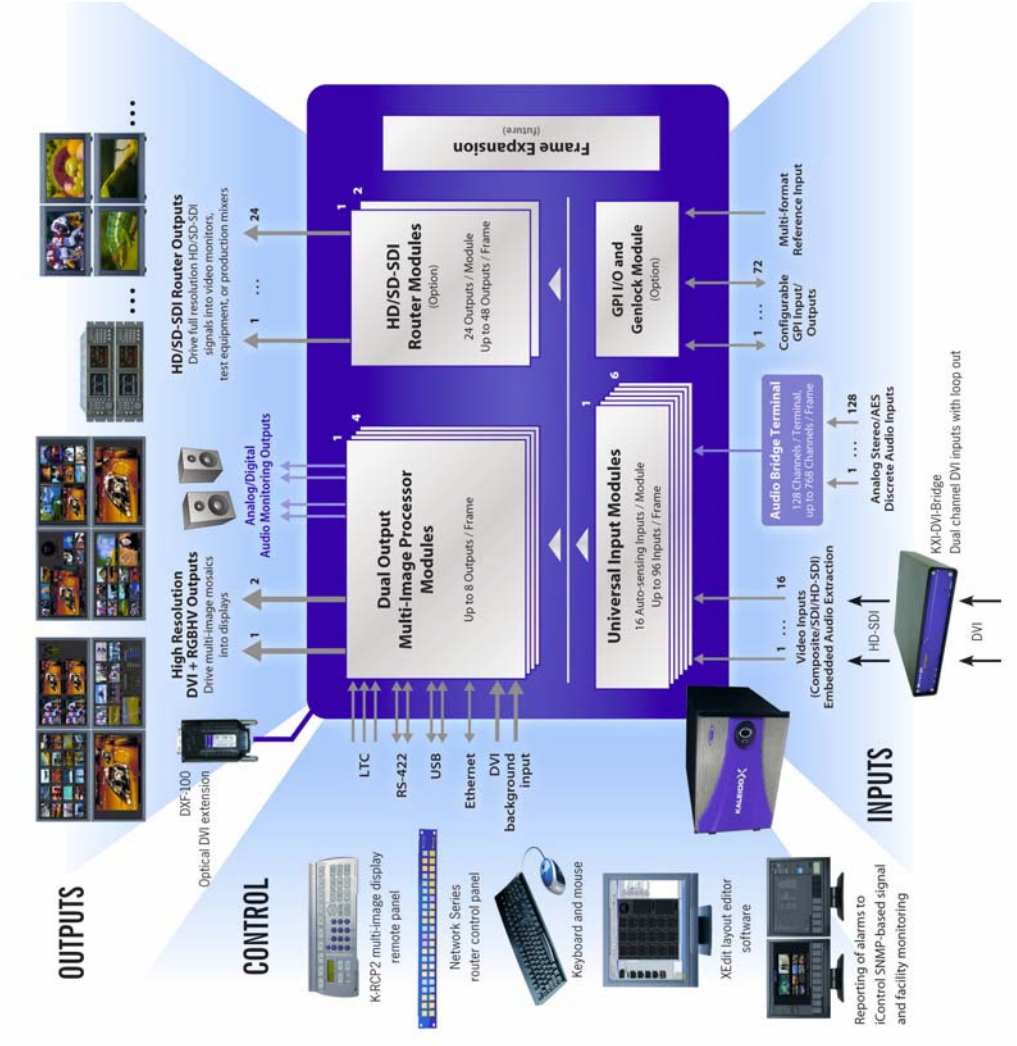
Action Description	Shortcut Key
Toggle Tools panel presence	Ctrl Shift T
Cut widget	Ctrl X
Copy widget	Ctrl C
Paste widget	Ctrl V
Duplicate widget	Ctrl D
Select all widgets	Ctrl A
Sends widget to back	Ctrl B
Sends widget to front	Ctrl R
Delete selection	DELETE
Redo last operation	Ctrl Y
Undo last operation	Ctrl Z
Unlock composite	F2

Required Materials (in the box)

Your Kaleido-X system package includes the following:

• Refer to the Hardware Manual

Kaleido-X System Overview



Kaleido-X System Overview

Detailed Directions

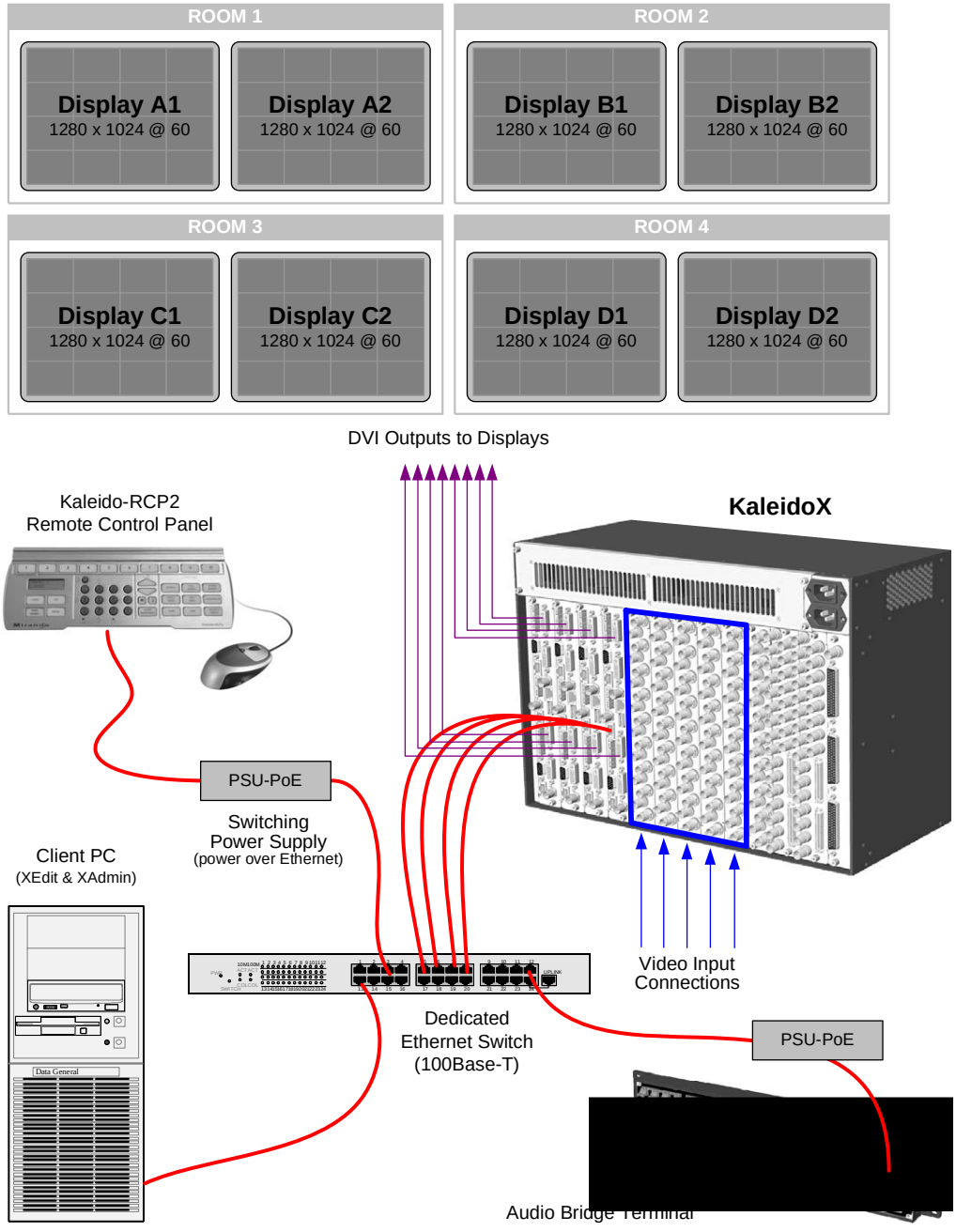
Step 1 – Physical Setup

To set up the Kaleido-X hardware, do the following:

1. With the Kaleido-X frame (enclosure) installed in its designated rack position, and before powering up the unit, verify that each card is securely seated in its slot.
2. Make the network and other connections as shown in the diagram on the next page. Connect a Client PC, the Kaleido-RCP2, Audio Bridge Terminal(s), and every output module to a dedicated 100Base-T Ethernet switch. You can also connect a mouse and a keyboard to your Kaleido-RCP2.

   Note: The Kaleido-RCP2 Remote Control Panel and Audio Bridge Terminals (ABTs) are optional devices, and may not have been shipped with your Kaleido-X system. For information on these and other Kaleido-X options, please contact your nearest Technical Support center.

3. The Kaleido-X has been tested and configured with a default resolution of 1280 x 1024 at 60 Hz. Connect the output of the Kaleido-X to one or more displays that support this resolution.
4. Connect one or more video sources to the frame.



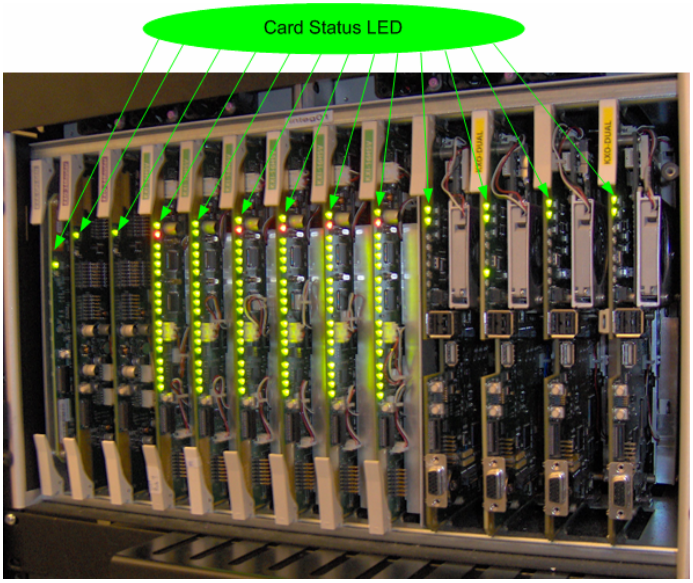
Kaleido-X cabling diagram

To power up the Kaleido-X, do the following:

1. Plug both power cords from the Kaleido-X into a grounded power outlet. The Kaleido-X does not have a power switch, and will start up as soon as it is plugged in. The startup sequence takes approximately 4 minutes, during which some video may appear on the display(s). The startup is completed when the CPU LEDs of the output cards (second from the top) are solid green.

To verify that the modules (cards) are ready:

1. Check the status LEDs on each module (card) installed in the Kaleido-X frame. Make sure that none are indicating an error condition (see table below).



Photograph of Kaleido-X frame showing LED indicators on modules.

CPU LED Color	Status	Action Required
Solid green	The card is ready for operation	None
Red	Fault	Verify that the card is securely seated in the proper slot in the frame. If status remains unchanged, remove the card, reseat it and then reboot.
Flashing green	The card is rebooting	Wait for card to reboot before starting operations

Step 2 – Networking Setup

In order for the Kaleido-X unit to be able to join a TCP/IP network, it must be configured with an IP address, a network mask, a gateway, and system name. In addition, a client PC must be configured to be able to communicate with the Kaleido-X. You must also configure the Kaleido-RCP2 unit.

Configuring the Kaleido-X

There are two possible configuration states for Kaleido-X systems as shipped:

Scenario A: If your organization had requested a specific IP configuration from Miranda, it would have been assigned prior to shipment. A configuration document, describing the IP address assignment of the frame and other system device, would be included in the shipment.

Scenario B: The Kaleido-X is shipped with default settings:

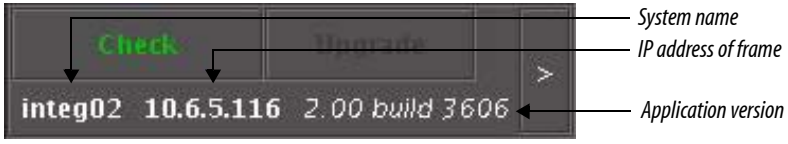
Frame IP Address = 10.0.3.70
Netmask = 255.255.0.0
Gateway = 10.0.0.1
Output A = 10.0.3.66
Output B =10.0.3.67
Output C =10.0.3.68
Output D =10.0.3.69

If, for some reason, the IP address of the Kaleido-X has been changed (i.e., no longer corresponds to the as-shipped configuration), it is still possible to determine the IP address.

To find the system IP address, system name and application version, do the following:

1. Connect a mouse to the front USB connector of an output card.
2. Drag the cursor to the lower right corner of the display. A small dialog appears, revealing the machine IP address between the system name and the application version. Take note of these values — they will be used later in the configuration process.

Display from card output showing dashboard (bottom right).



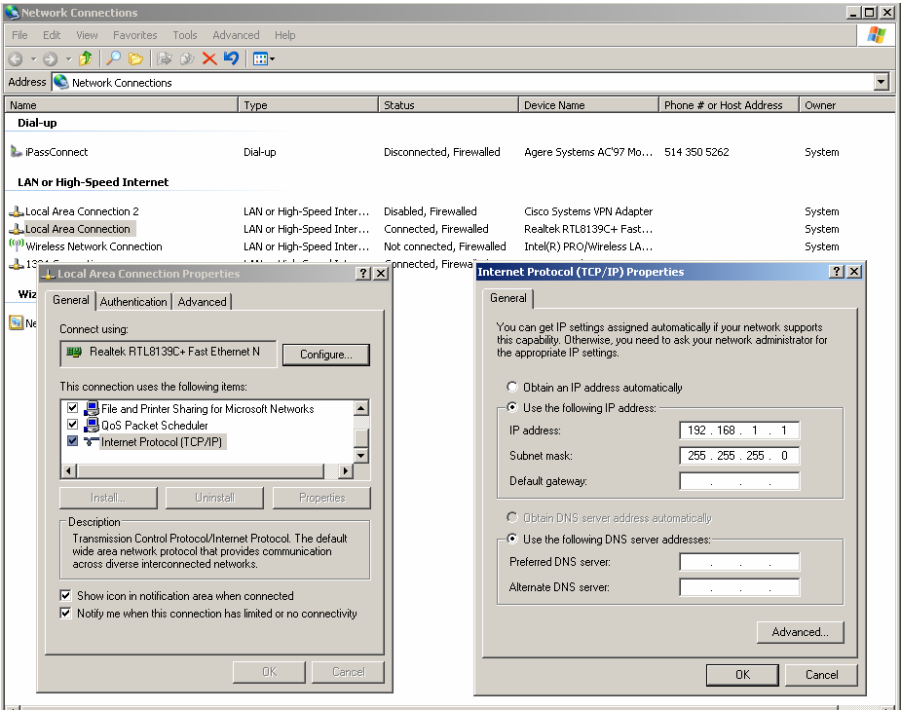
Enlarged view of dashboard.

Configuring a Client PC

The IP address of the Client PC that you will use to communicate with the Kaleido-X (via XAdmin and XEdit) must have an address that matches the subnet of the Kaleido-X IP address.

To change the IP address of the Client PC, do the following:

1. From the Windows XP **Start** menu, select **Settings|Control Panel | Network Connections and Local Area Connection**.
2. From the **File Properties** menu, select **Internet Protocol (TCP/IP)**, and then select **Properties**.


Network Connections
File Edit View Favorites Tools Advanced Help
Address Network Connections
Name Type Status Device Name Phone # or Host Address Owner
Dial-up
iPassConnect Dial-up Disconnected, Firewalled Agere Systems AC'97 Mo... 514 350 5262 System
LAN or High-Speed Internet
Local Area Connection 2 LAN or High-Speed Inter... Disabled, Firewalled Cisco Systems VPN Adapter System
Local Area Connection LAN or High-Speed Inter... Connected, Firewalled Realtek RTL8139C+ Fast... System
Wireless Network Connection LAN or High-Speed Inter... Not connected, Firewalled Intel(R) PRO/Wireless LA... System
Local Area Connection Properties
General Authentication Advanced
Connect using:
Realtek RTL8139C+ Fast Ethernet N
Configure...
This connection uses the following items:
File and Printer Sharing for Microsoft Networks
QoS Packet Scheduler
Internet Protocol (TCP/IP)
Install... Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
Show icon in notification area when connected
Notify me when this connection has limited or no connectivity
OK Cancel
Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 1 . 1
Subnet mask: 255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK Cancel

Configuring IP settings on a PC running Windows.

3. Under the General tab, click "Use the following IP address".
4. Type an IP address in the same range as the default Frame IP address of the Kaleido-X. For example, the Kaleido-X uses the default Frame IP address of 10.0.3.70, (if in doubt, contact your network administrator).
5. Type a subnet mask in the same range as that of the Kaleido-X.

6. Click **OK** to apply these settings.
7. In the **Local Area Connection Properties** window, click **OK**.

To change the IP address of the Kaleido-X system, do the following:

1. Configure your Client PC with an IP address in the same range as the IP address of the Kaleido-X. See "Configuring a Client PC" on page 10.
2. Open a web browser and type the following:

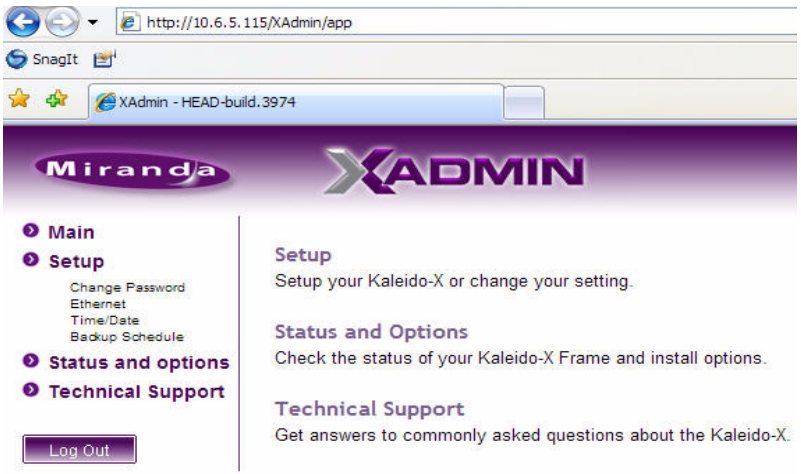
   `http://AAA.BBB.C.DDD/`

   where AAA.BBB.C.DDD is the Frame IP address of the Kaleido-X.

   Example: `http://10.0.3.70/`

   A login screen appears.
3. Type "admin" in the User Name field. Leave the password field blank, and press Enter.

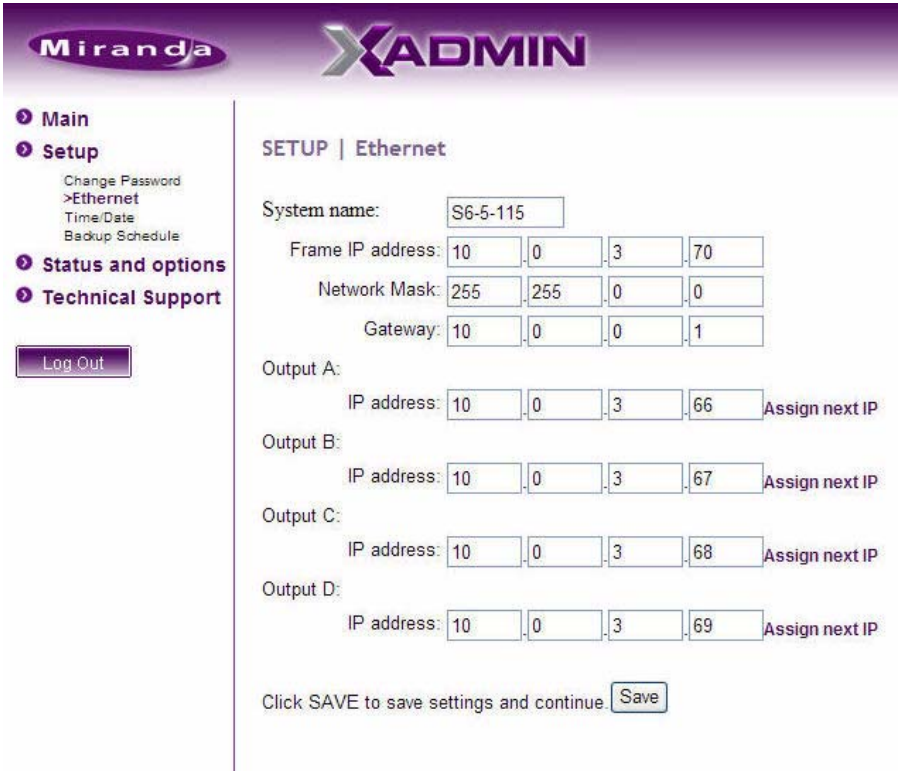
   The XAdmin welcome page appears.



XAdmin Main page

4. From the XAdmin welcome page, select **Setup | Ethernet**.

   The **XAdmin Setup > Ethernet** page appears, showing the current system name, IP address, network mask, gateway and output cards IP addresses.


Miranda
XADMIN
Main
Setup
Change Password
>Ethernet
Time/Date
Backup Schedule
Status and options
Technical Support
Log Out
SETUP | Ethernet
System name: S6-5-115
Frame IP address: 10 . 0 . 3 . 70
Network Mask: 255 . 255 . 0 . 0
Gateway: 10 . 0 . 0 . 1
Output A:
IP address: 10 . 0 . 3 . 66 Assign next IP
Output B:
IP address: 10 . 0 . 3 . 67 Assign next IP
Output C:
IP address: 10 . 0 . 3 . 68 Assign next IP
Output D:
IP address: 10 . 0 . 3 . 69 Assign next IP
Click SAVE to save settings and continue. Save

XAdmin Setup > Ethernet page

5. Enter the appropriate IP address information in each of the fields, and then click **Save**.

   The **Apply Settings** link appears in the middle of the left window pane.

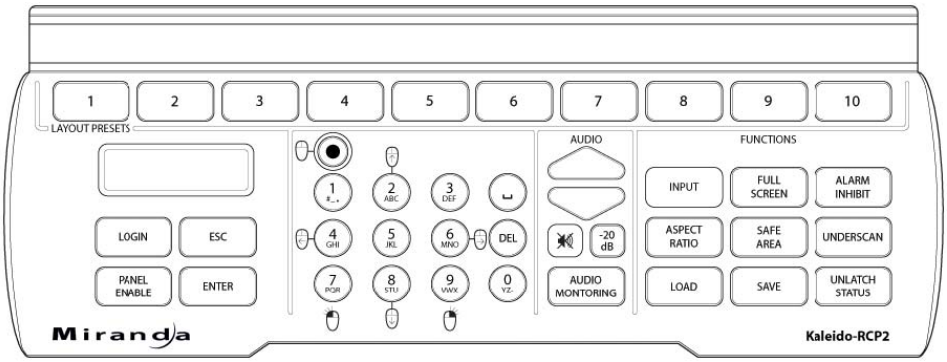
6. Click **Apply Settings**.

   Kaleido-X system must be restarted in order for any changes to the network configuration to take effect. A message appears giving you the option of rebooting immediately or later.

7. Remember to change your client PC's IP address to one that matches the new Kaleido-X subnet. You will also need to edit the XAdmin URL in your web browser in order to log back in to the frame.

Configuring the RCP2

The optional Kaleido-RCP2 is a multi-function remote control panel designed for use with Miranda's Kaleido-X. Ethernet connectivity allows multiple RCP2 users to access multiple Kaleido-X systems, allowing convenient access to the real-time operating features of the Kaleido-X. When logged into a Kaleido-X via its ethernet connection, it can control various operating features of the Kaleido-X.



Note: The Kaleido-RCP2 is powered through the RJ-45 ethernet connector. There is no power ON/OFF button, so the device is ON when a powered ethernet cable is connected.

Before you can use the RCP2 to operate your Kaleido-X, you must set up the ethernet connection between the two devices. By default, the Kaleido-RCP2 is shipped with DHCP enabled, so it will automatically be assigned an IP address by a DHCP server. If no DHCP server is present on the network, the Kaleido-RCP2 will default to its static IP address (10.0.3.191).

Note: The time-out period before the RCP2 defaults to its static address is "3" minutes. To speed up the initialization, disable the DHCP option.

To configure the IP address of the RCP2, do the following:

1. Press and hold the ENTER key on the RCP2 for "8" seconds to display the Configuration menu.
2. Press the "8" key (to move down the list) until ETHERNET OPTIONS appears on the RCP2 LCD display.
3. Press ENTER key to display the ETHERNET OPTIONS menu.
4. Select the IP ADDRESS menu using the "2" key (to move up in the list) and/or the "8" key (to move down the list), then press ENTER.
5. Using the numeric keypad, type the chosen IP address, then press ENTER.

6. Select the NETWORK MASK menu using the “2” key (to move up in the list) and/or the “8” key (to move down the list), then press ENTER.
7. Using the numeric keypad, type the chosen network mask, then press ENTER.

You have successfully configured a static IP address on the RCP2.

To select a ROOM for the RCP2, do the following:

1. Press and hold the ENTER key for “8” seconds to enter the Configuration menu.
2. In the ROOM SELECTION display, press ENTER again to get the room list from the Kaleido-X systems that are currently available on the network.
3. With the room list displayed, highlight the room you wish to access by pressing the “2” key (to move up in the list) and/or the 8 key (to move down the list).

Note: By default, the two head (DVI/VGA) outputs from each of cards OUTPUT A, B, C and D are assigned to ROOM 1, ROOM 2, ROOM 3 and ROOM 4 respectively.

4. When the desired room name is highlighted, press ENTER to accept the new selection.
5. When prompted, log in to the selected ROOM (see “RCP2 Login” on page 13).

RCP2 Login

As a network device, the RCP2 provides access to any ROOM configuration on any Kaleido-X system on the network. As a security measure, access is controlled by a login procedure.

To log in to a Kaleido-X system from the RCP2, do the following:

1. Press the LOGIN key.

   The LCD on the RCP2 will display the following message:

   LOGIN Position
   Admin

2. Press ENTER to select Admin.

   The LCD on the RCP2 will prompt you to enter a password.

3. Press ENTER again (by default, there is no password).

   The LCD will display the message "Access granted" if the login was successful. If a mouse is connected to the RCP2, then you should be able to see and move the mouse pointer on the Monitor Wall.

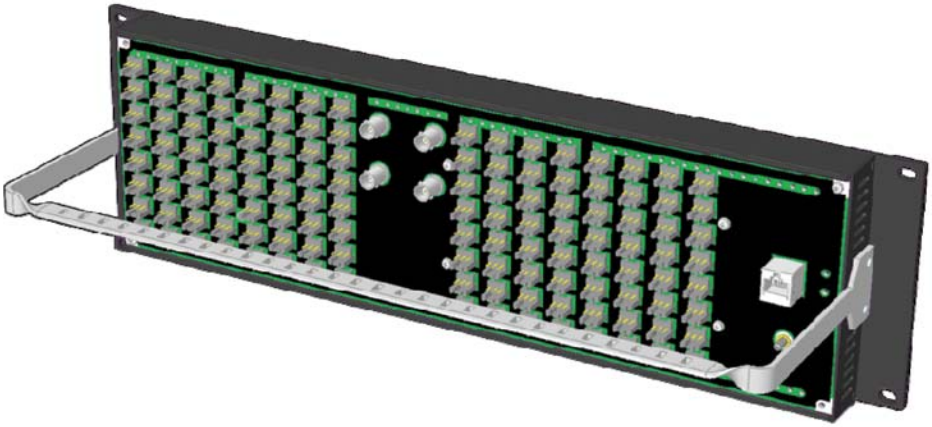
Note: If at any time the LCD displays the message "Target system is offline" or "No login list available", press the ESC, ENTER and DELETE keys simultaneously and go back to Step 1.

For more information, please refer to the *Kaleido-RCP2 User's Manual*, available on the DVD-ROM that shipped with your system.

Configuring an Audio Bridge Terminal

The optional Audio Bridge Terminal (ABT) is an external audio multiplexer/serializer for the Kaleido-X. The Kaleido-X supports up to 128 inputs, and all of the video input connectors are located on the rear panels associated with the KXI-series of cards.

There is not enough space on the rear panels to also include the audio connectors. The ABT provides connector space for the audio signal inputs, and multiplexes all the audio signals into combined serial feeds on coaxial cables that connect to the KXI cards.



Note: The ABT is powered through the RJ-45 ethernet connector. There is no power ON/OFF button, so the device is ON when a powered ethernet cable is connected.

To configure the IP address and other network settings of the ABT, do the following:

1. Connect a PC to a hub or switch.
2. Referring to "Configuring a Client PC" on page 10, configure the PC with the following network settings:

   DHCP = OFF
   Static IP address = 10.0.0.1
   Subnet mask = 255.255.0.0
   Default gateway = 10.0.0.1
3. Apply power to the Audio Bridge Terminal and make sure it is connected to the same hub or switch as the PC. If the hub or switch is Power over Ethernet (PoE) enabled, simply connect it to the unit using an

Ethernet cable. If not, PoE mid-span ("inserter") equipment must be placed between the hub or switch and the Audio Bridge Terminal.

4. Press the RESET button (located on the right-hand side of the ABT rear panel beside the ETHERNET/ POWER RJ-45 connector) for at least 1 second. The Audio Bridge Terminal will reboot with the following static network configuration:

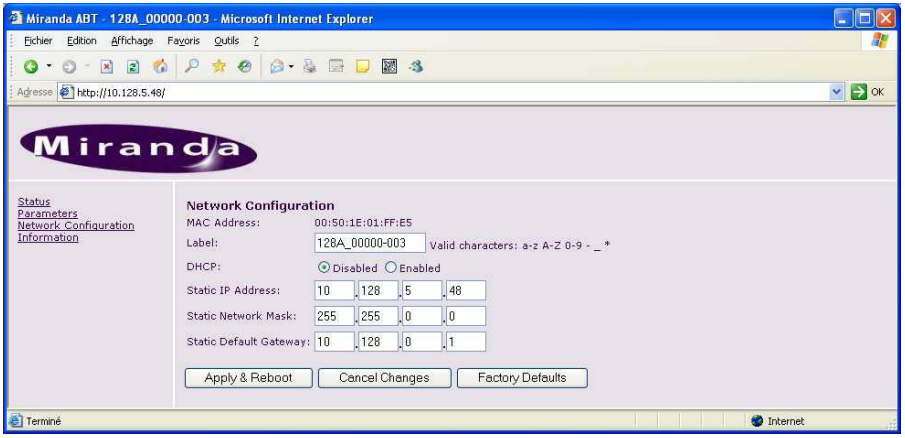
   DHCP = OFF
   Static IP address = 10.0.3.190
   Subnet mask = 255.255.0.0
   Default gateway = 10.0.0.1

5. Using a web browser on the PC, connect to the ABT using the following address: 10.0.3.190.

   The home page of the ABT's built in web server is displayed.

6. Click on Network Configuration (in the left panel).

   The Network Configuration page is displayed.



7. Change the ABT's network settings, as necessary, then click Apply & Reboot.

For more information, please refer to the *Audio Bridge Terminal User's Manual*, available on the CD-ROM that shipped with your system.

Step 3 – Select Default Layouts

If your system was configured prior to shipment, then the designated layout will show up on all displays. Otherwise, a gray screen will appear with the following message in the middle:

"No layout has been assigned to this room. Please load a layout."

To select a default layout, do the following:

1. Connect a mouse to the RCP2.
2. If you have not already done so, log in to the Kaleido-X from the RCP2 (see "RCP2 Login" on page 13)
3. Press the Right-Click and from the Right-Click menu select the Load layout.

   A layout browser appears on the display(s) associated with the current ROOM. By default, each ROOM is associated with one output card. Each default layout is pre-configured to show 16 video streams for each input card.

Example of a default layout showing 16 video streams

4. Choose a default layout from the layout browser.

   The video source should appear on the ROOM display(s).

Note: You can also use the first 6 LAYOUT PRESET buttons on the RCP2 to select a default layout.

Step 4 – XEdit Installation

Kaleido-X Layout Editor (XEdit) is used to create layouts and configure the Kaleido-X. When the computer running XEdit is connected to the Kaleido-X through a TCP/IP network, XEdit can export the Layouts to the Kaleido-X.

To install the XEdit software, do the following:

1. Verify that the Client PC on which you are about to install XEdit meets the minimum hardware requirements.
2. Verify that the Client IP address is in the same subnet as the IP address configured for the Kaleido-X (refer to "Configuring a Client PC" on page 10).
3. If there is a previous version of XEdit already installed, you should uninstall it by choosing
   Start > All Programs > Miranda -> XEdit 2.00 > Uninstall XEdit 2.00
4. Insert the XEdit installation DVD into the PC.
5. Double-click on the Install_XEdit_2_00.exe installer file to start the installer application.
   The installer application launches, and the Introduction screen appears. Press **NEXT**.

   The Pre-Installation Summary screen appears.
6. Press **INSTALL**.

   Note: During installation, you may be asked for permission to overwrite font files (e.g. WIDEA___.TTF).

   After a few moments, the Install Complete screen appears.
7. Press **DONE**.
   Once the XEdit installation procedure is completed, an XEdit 2.00 icon will appear on the PC desktop, and the Microsoft Windows Program menu will be updated to include a Miranda -> XEdit 2.00 folder.

   Note: Refer to the XEdit User Guide for information on how to create layouts.

Step 5 – System Verification

To perform a system verification, do the following:

You can check internal system statuses via the web-based XAdmin application. There are two ways to access XAdmin:

1. *Method 1:* Use XEdit on a client PC to start the XAdmin application (see "Step 4 – XEdit Installation" on page 19). Start Xedit and select the "Use XAdmin" option in the Configure drop-down menu (look in the upper menu bar). This will start your default web browser.

   Method 2: Open a web browser on the client PC and type the following:

   `http://AAA.BBB.C.DDD/`

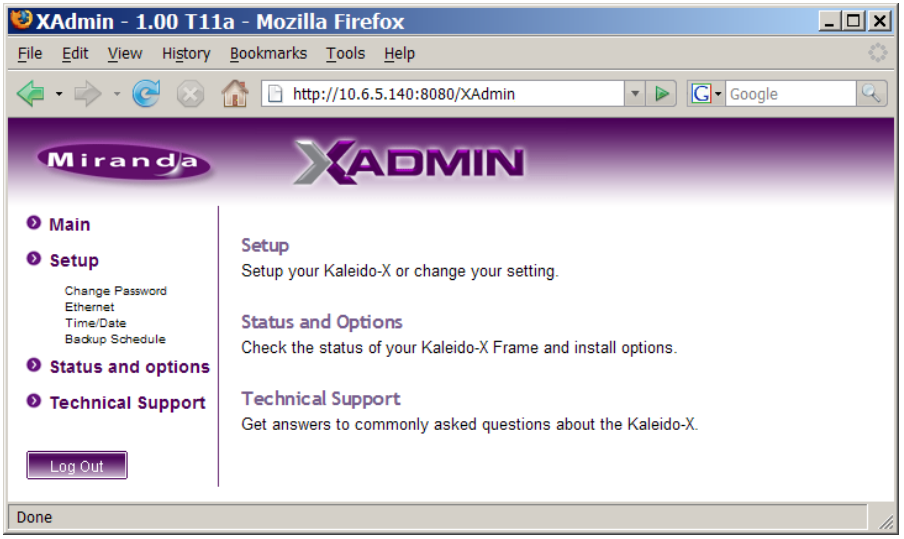
   where AAA.BBB.C.DDD is the Frame IP address of the Kaleido-X.

   Example: `http://10.0.3.70/`

   A login screen appears.

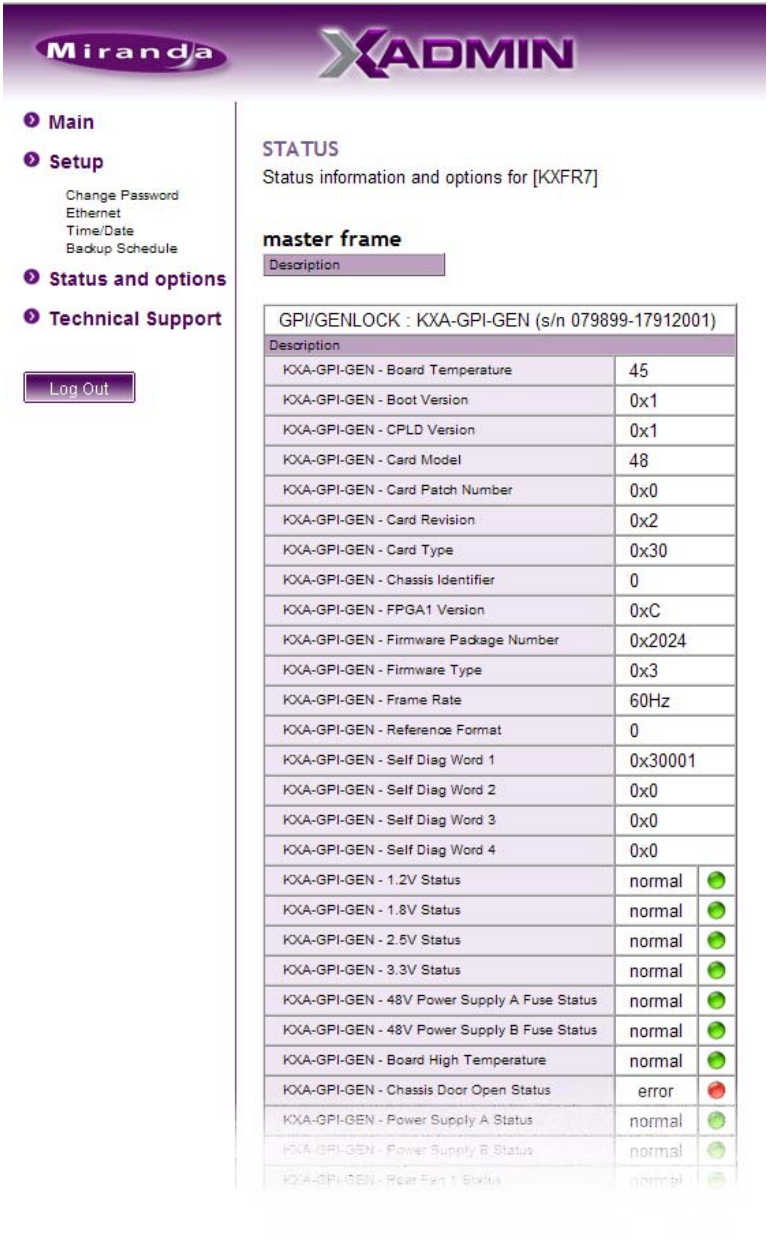
2. Type "admin" in the User Name field. Leave the password field blank, and press Enter.

   The XAdmin welcome page appears.



3. From the XAdmin welcome page, select **Status and options**.

The **XAdmin > Status and options** page appears, displaying a list of all cards and their statuses. Cards are presented in the order they appear, from left to right when looking at the front of the chassis.


Miranda
XADMIN
Main
Setup
Change Password
Ethernet
Time/Date
Backup Schedule
Status and options
Technical Support
Log Out
STATUS
Status information and options for [KXFR7]
master frame
Description
GPI/GENLOCK : KXA-GPI-GEN (s/n 079899-17912001)
Description
KXA-GPI-GEN - Board Temperature 45
KXA-GPI-GEN - Boot Version 0x1
KXA-GPI-GEN - CPLD Version 0x1
KXA-GPI-GEN - Card Model 48
KXA-GPI-GEN - Card Patch Number 0x0
KXA-GPI-GEN - Card Revision 0x2
KXA-GPI-GEN - Card Type 0x30
KXA-GPI-GEN - Chassis Identifier 0
KXA-GPI-GEN - FPGA1 Version 0xC
KXA-GPI-GEN - Firmware Package Number 0x2024
KXA-GPI-GEN - Firmware Type 0x3
KXA-GPI-GEN - Frame Rate 60Hz
KXA-GPI-GEN - Reference Format 0
KXA-GPI-GEN - Self Diag Word 1 0x30001
KXA-GPI-GEN - Self Diag Word 2 0x0
KXA-GPI-GEN - Self Diag Word 3 0x0
KXA-GPI-GEN - Self Diag Word 4 0x0
KXA-GPI-GEN - 1.2V Status normal
KXA-GPI-GEN - 1.8V Status normal
KXA-GPI-GEN - 2.5V Status normal
KXA-GPI-GEN - 3.3V Status normal
KXA-GPI-GEN - 48V Power Supply A Fuse Status normal
KXA-GPI-GEN - 48V Power Supply B Fuse Status normal
KXA-GPI-GEN - Board High Temperature normal
KXA-GPI-GEN - Chassis Door Open Status error
KXA-GPI-GEN - Power Supply A Status normal
KXA-GPI-GEN - Power Supply B Status normal
KXA-GPI-GEN - Rear Fan 1 Status normal

Partial view of XAdmin Status and Options Page

4. Check the status of the Kaleido-X frame to make sure that there are no errors or alerts related to:
   - system temperature
   - fan operation
   - card fault conditions

The main system statuses are reported by the KXA-GPI-GEN card (the first in the list). The subsequent statuses—especially the ones listed in the table below—should all be normal, although if you left the door open when checking the card LEDs, you may see a warning under "Chassis door open status".

KXA-GPI-GEN - 1.2V Status
KXA-GPI-GEN - 1.8V Status
KXA-GPI-GEN - 2.5V Status
KXA-GPI-GEN - 3.3V Status
KXA-GPI-GEN - 48V Power Supply A Fuse Status
KXA-GPI-GEN - 48V Power Supply B Fuse Status
KXA-GPI-GEN - Board High Temperature
KXA-GPI-GEN - Chassis Door Open Status
KXA-GPI-GEN - Power Supply A Status
KXA-GPI-GEN - Power Supply B Status
KXA-GPI-GEN - Rear Fan 1 Status
KXA-GPI-GEN - Rear Fan 2 Status
KXA-GPI-GEN - Rear Fan 3 Status
KXA-GPI-GEN - Rear Fan 4 Status
KXA-GPI-GEN - Rear Fan 5 Status
KXA-GPI-GEN - Rear Fan 6 Status

To verify that the RCP2 is functioning normally, do the following:

1. Log onto the RCP2.
2. Test various operations with the RCP2 and the mouse (e.g. load layout presets).

To verify that the ABT is functioning normally, do the following:

1. Inspect the ACTIVITY and front panel LEDs on the unit to make sure there are no error conditions.

   The ACTIVITY indicator is located on the right-hand side of the rear panel. This LED reports the status of the ethernet connection as follows:

Color	Board Status
Off	No link detected
Green	Normal (good link)
Orange	Activity
Red	Hardware fault
Flashing Red	Upgrading firmware

   Two LEDs are visible on the front panel, one for each power supply. When lit, they both indicate the same status:

Color	Board Status
Green	Normal
Flashing Green	Normal, rebooting
Orange	Warning
Flashing Orange	Warning, rebooting
Red	Hardware fault
Flashing Red	Upgrading firmware

   When the ABT is powered up, all three LEDs will be orange until the boot sequence is terminated. This is a visual indicator that the LEDs are functioning properly.

Customer Support

Technical Support Services

For technical assistance, please contact the Miranda Technical support centre nearest you:

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Telephone: +1-800-224-7882
e-mail: techsupp@miranda.com
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2 Operation of the Monitor Wall

This section introduces and highlights the Kaleido-X Monitor Wall actions.

Summary

Overview *25*
Key Concepts *25*
Checklist *29*
Detailed Directions *30*

Overview

In this section, you will learn to:

• "To log into the Monitor Wall:" on page 30
• "To load a Layout:" on page 30
• "To load a Layout from the RCP-2 and Mouse:" on page 32
• "To load a Layout from Third Party Applications:" on page 33
• "To Execute Layout Actions:" on page 33

- "To describe Layout Components:" on page 33
- "To assign a Source to a Monitor:" on page 34
- "To display a Source Fullscreen:" on page 35
- "To change an External Router Crosspoint:" on page 36
- "To refresh a Layout:" on page 37
- "To assign a Channel to a Widget:" on page 38
- "To invoke an Action:" on page 39
- "To change a Crosspoint:" on page 42
- "To toggle the Safe Area:" on page 40
- "To change the Aspect Ratio:" on page 41
- "To edit a text:" on page 42
- "To Trigger a GPI Out:" on page 43
- "To Obtain an IP Address and System Name:" on page 44

In this section, you will be able to answer the following questions:

- "What is KX Runtime?" on page 27
- "What is a Video Widget?" on page 27
- "What is the Dashboard?" on page 27
- "What is a Clock?" on page 27
- "What is a Audio Level Meter?" on page 27
- "What is a Channel?" on page 27
- "What is a Room?" on page 28
- "What is a Layout?" on page 28
- "What is a Timecode Widget?" on page 28
- "What is a UMD?" on page 28
- "What is an Action?" on page 28
- "What is Crosspoint?" on page 28
- "What is Trigger?" on page 28

Key Concepts

KX Runtime

What is KX Runtime?

KX Runtime is a video monitoring application that runs on the KX Hardware.

Video Widgets

What is a Video Widget?

A video widget is the actual representation of video on the display.

Dashboard

What is the Dashboard?

A dashboard is the information on the display that contains the system name, IP address and software build version. This information resides on the bottom right of the Kaleido-X Monitor Wall.

Clock

What is a Clock?

A clock is the visual representation of time in a video or display. Clocks can be in a digital or analog format

Audio Level Meter

What is a Audio Level Meter?

A audio level meter is the visual representation of sound in a video.

Channel

What is a Channel?

A Channel is a grouping of physical assignments. Each assignment is associated to one level of the channel.

Safe Area Markers

What is a Safe Area Marker?

Safe Area Marker is a configurable shaded region inside a video window. Example 4:3 region inside a 16:9 window.

Room

What is a Room?

A Room is a visual grouping of displays and potentially full screen zones. A room presents various physical displays that can be positioned and sized in an actual room as viewed by the user.

Layout

What is a Layout?

A Layout refers to a visual grouping of widgets on the monitor wall. Each widget on the display screen and can be positioned and resized.

Timecode Widget

What is a Timecode Widget?

This displays the Timecode from a video source, or external Longitudinal Timecode (LTC) signal.

UMD

What is a UMD?

Under Monitor Display is a text field that can be static or updated by a third party device. Under Monitor Display usually indicates the name of the video source seen in a video widget.

Action

What is an Action?

An Action is an operation automatically performed in response to a specific trigger.

Trigger

What is Trigger?

A trigger is an event that triggers an action. An example of a trigger could be a double-click on a widget. The action that occurs after completion of the trigger could be the control panel for the widget displays.

Crosspoint

What is Crosspoint?

A Crosspoint is a link between a router's video input and output.

Checklist

Monitor Wall Actions

Follow these steps to complete all the tasks required for operating the Kaleido-X Monitor Wall:

1. Log into a Monitor Wall. Refer to “Logging into the Monitor Wall” on page 28.
2. Load a Layout. Refer to “Loading a Layout” on page 28.
3. Load a Layout from RCP-2 and Mouse. Refer to “Loading a Layout using the RCP-2 and Mouse” on page 30.
4. Load a Layout from Third party Applications. Refer to “Loading a Layout from Third Party Applications” on page 33.
5. Execute Actions. Refer to “Executing Actions” on page 33.
6. Describe Layout Components. Refer to “Describing Layout Components” on page 33.
7. Assign a Source to a Monitor. Refer to “Assigning a Source to a Monitor” on page 33.
8. Display a Source Fullscreen. Refer to “Displaying a Source Fullscreen” on page 35
9. Control an External Routing Switch. Refer to “Controlling an External Routing Switch” on page 36
10. Refresh a Layout. Refer to “Refreshing a Layout” on page 36.
11. Assign a Channel to a Widget. Refer to “Assigning a Channel to a Widget” on page 37.
12. Invoke an Action. Refer to “Invoking an Action” on page 38.
13. Change a Crosspoint. Refer to “Changing a Crosspoint” on page 39.
14. Toggle the Safe Area. Refer to “Toggling Safe Areas” on page 40.
15. Change the Aspect Ratio. Refer to “Changing the Aspect Ratio” on page 41.
16. Edit a Text. Refer to “Editing Text” on page 43.
17. Trigger a GPI Out. Refer to “Triggering a GPI Out” on page 44
18. Obtain an IP Address and System Name. Refer to “Obtaining IP Addresses and System Names” on page 45

Detailed Directions

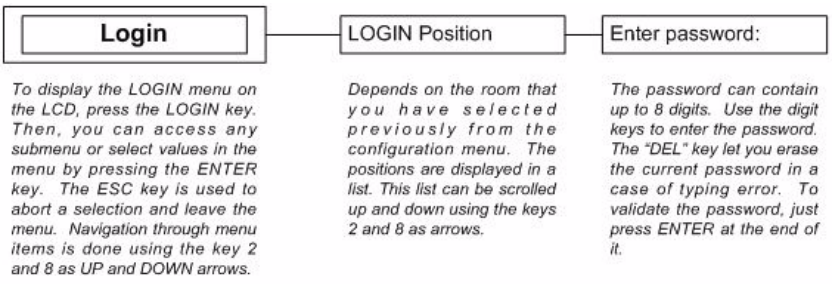
This section focuses on the actions the user can perform on the Kaleido-X Monitor Wall.

Logging into the Monitor Wall

To log into the Monitor Wall:

1. Press **LOGIN** key.
2. Log into the **Kaleido-X Room** (either as Administrator or User) using the RCP2.
3. Enter your **Password.**

   The following is the visual account of the login menu as it appears on the LCD.


Login
LOGIN Position
Enter password:
To display the LOGIN menu on the LCD, press the LOGIN key. Then, you can access any submenu or select values in the menu by pressing the ENTER key. The ESC key is used to abort a selection and leave the menu. Navigation through menu items is done using the key 2 and 8 as UP and DOWN arrows.
Depends on the room that you have selected previously from the configuration menu. The positions are displayed in a list. This list can be scrolled up and down using the keys 2 and 8 as arrows.
The password can contain up to 8 digits. Use the digit keys to enter the password. The "DEL" key let you erase the current password in a case of typing error. To validate the password, just press ENTER at the end of it.

RCP-2 Display status

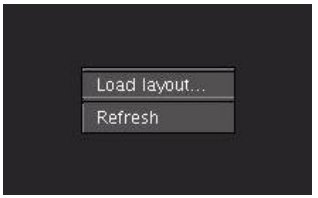
4. Reference Hardware Manual 7.6.1.

Loading a Layout

To load a Layout:

1. Right-click on the **Monitor Wall** Layout background.

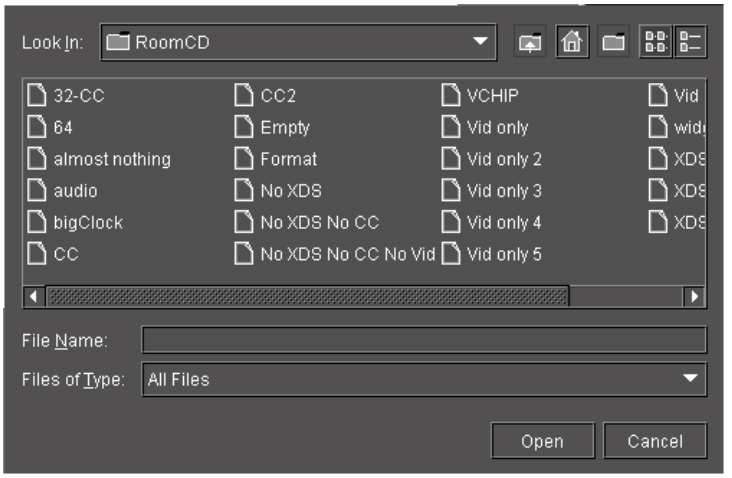
   The Right-Click menu appear.



Right-Click *menu*

2. Select **Load Layout**.

   The New Layout location window appear.



New Layout location window

3. Select the **New Layout** form the location.
4. Click **Open**.

   The New Layout appear.

New Layout window

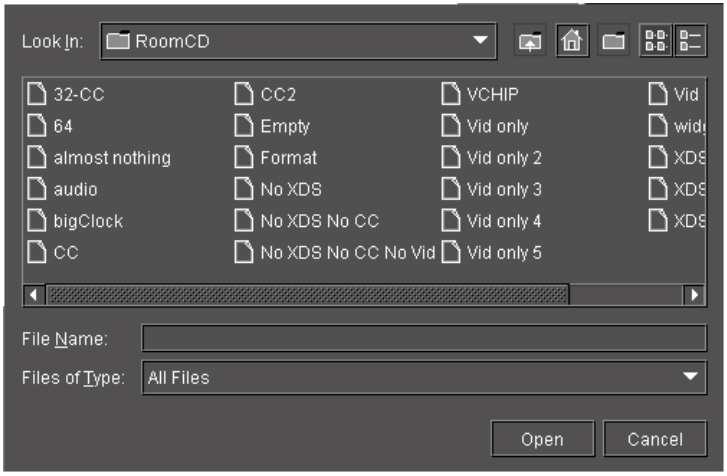
Loading a Layout using the RCP-2 and Mouse

To load a Layout from the RCP-2 and Mouse:

Using the RCP2 LOAD button:

1. Log into the **Kaleido-X Room** using the RCP2.
2. Press the **Load** button the RCP2.

   The **Layout Chooser** appears.



Layout chooser

3. Select the **Layout** to load from within the room.
4. Click **Open**.

Executing Actions

Note: Actions works on the Monitor Wall, only when they are configured in XEdit. When the Kaleido-X cursor is over a widget with an assigned action, the cursor changes to a hand.

To Execute Layout Actions:

1. Log into the **Kaleido-X Room** using the RCP2.
2. Place the mouse cursor over the **Widget** configured to that action.
3. Double or single-click on the Left Mouse Button.

Assigning a Source to a Monitor

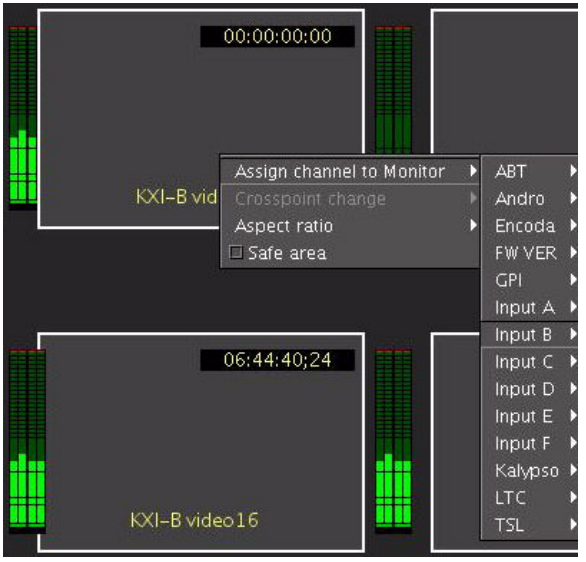
Note: Channel assignments can also be changed by configuring Actions in XEdit.

To assign a Source to a Monitor:

Using the RCP2 Channel button:

1. Log into the **Kaleido-X Room** using the RCP2.
2. Place the cursor over the monitor to change the source assignment.
3. Press the **Channel button.**

   The Assign Channel to Monitor menu appear.



Right-Click Menu

4. Select **Assign Channel** to monitor.
5. Select the **New Channel** to assign the monitor from the list.

Monitor Channel select

Displaying a Source Fullscreen

Note: The fullscreen layout can also be loaded by configuring Actions in XEdit.

To display a Source Fullscreen:

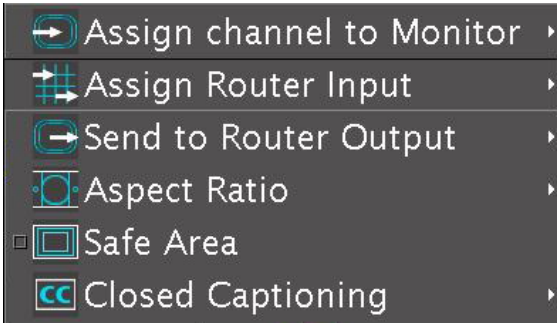
1. Log into the **Kaleido-X Room** using the RCP2.
2. Move the cursor over the **Monitor** for a fullscreen view.
3. Press the **Fullscreen** button on the RCP2.

   The Fullscreen Layout is loaded into the Fullscreen Zone assigned to the user.

Changing an External Router Crosspoint

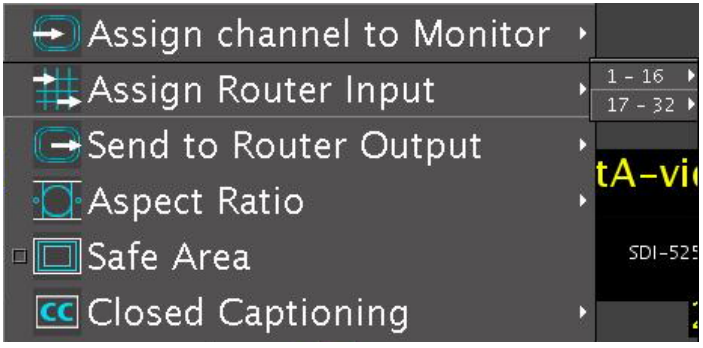
To change an External Router Crosspoint:

1. Right-Click click on one of the video monitor located on the **Monitor Wall**.
   The Right-Click menu appears.



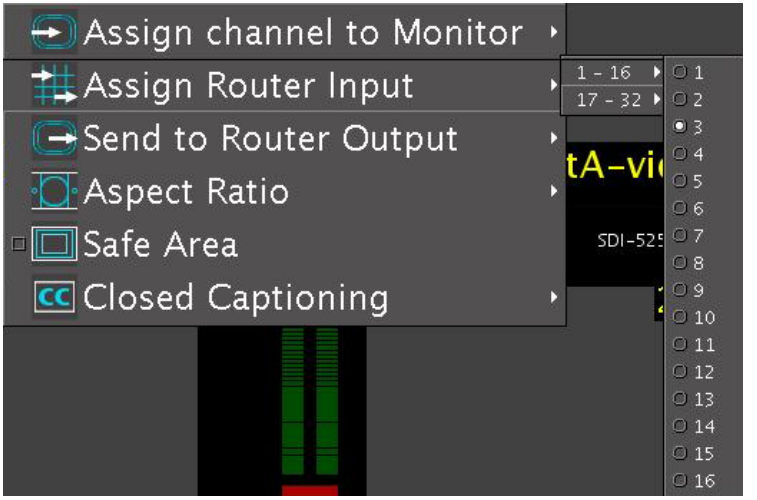
Right-Click Menu

2. Move the mouse pointer over the **Assign Router input.**
   The Assign Router input group appears.



Assign Router input group

3. Move the mouse pointer over the **Assign Router Input** group.
   The selected input within the group appears.



Selected Group input

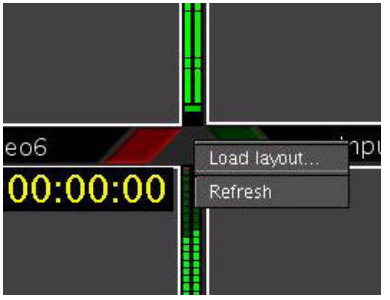
4. Select the desired input.

Refreshing a Layout

To refresh a Layout:

1. Right-click on the **KX Monitor Wall**.

   The Right-Click menu appear.



Right-Click menu

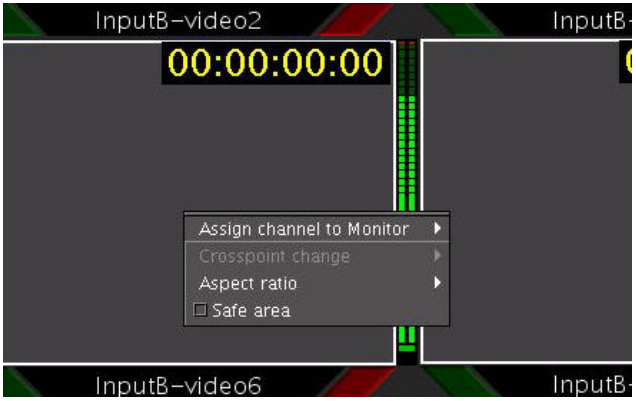
2. Select **Refresh**.

   The Refreshed Layout appear.

Assigning a Channel to a Widget

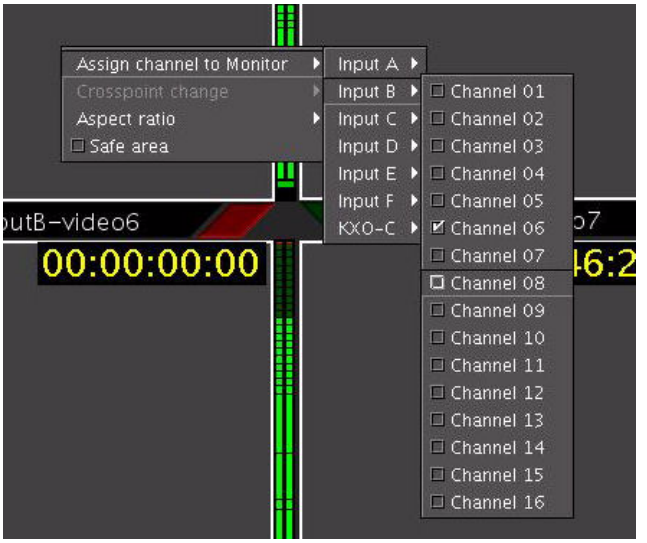
To assign a Channel to a Widget:

1. Right-click on the **Widget**.
   The Widget Right-Click menu appear.



Widget Right-Click menu

2. Select Assign Channel to Monitor|Video|UMD|Audiometer|Timecode|Clock.
   The **Channel** Right-Click menu appear.



Channel Right-Click menu

3. Select **Channel.**

   The **Channel Assignment** to the **Widget** appear.

Channel Assignment window

Invoking an Action

To invoke an Action:

1. Place the mouse pointer over the **Widget**.

   The Mouse pointer changes to a **Hand** icon.

2. On the created **Action** single or double-click.

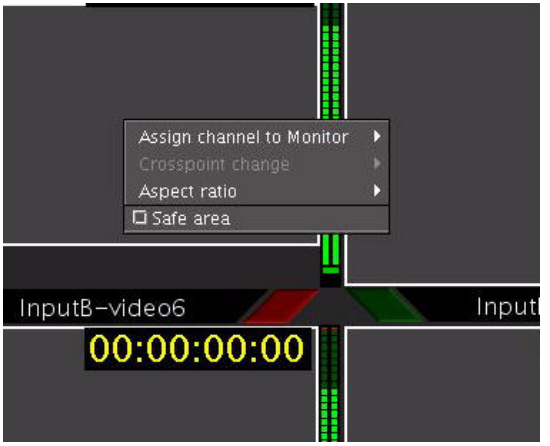
The invoked **Action** appears.

Toggling Safe Areas

To toggle the Safe Area:

1. Right-click on the **Video Widget**.

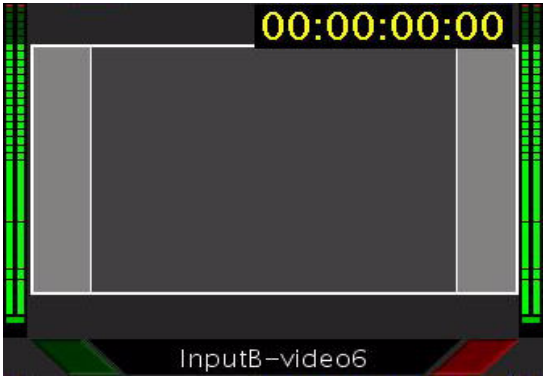
   The Right-Click menu appear.



Right-Click menu

2. Select **Safe Area.**

   The Toggled Safe Area appear.



Toggled Safe Area

Changing the Aspect Ratio

To change the Aspect Ratio:

1. Right-click on the **Video Widget**.

   The Right-Click menu appear.

   Right-Click menu

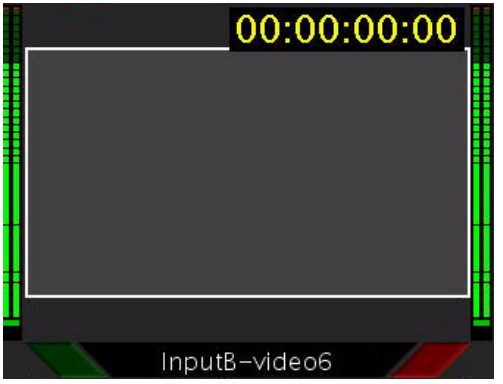
2. Select **Aspect Ratio**.

   The Aspect Ratio menu appear.

   Aspect Ratio menu

3. Select either **4.3** or **16.9**.

   The modified video Aspect Ratio appear.



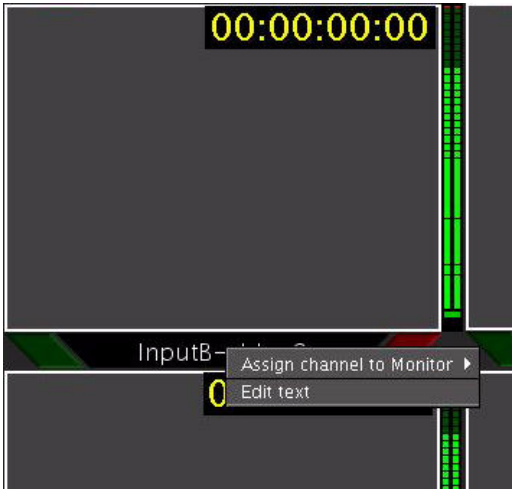
Aspect Ratio modification

Editing Text

To edit a text:

1. Right-click on the **UMD Widget**.

   The UMD Widget menu appear.



UMD Widget menu

2. Select **Edit Text**.

   The **Edit Text** field appear.

Edit Text field

3. Type new text and press **ENTER** from **RCP** or external keyboard.

   The new **Text** appear in UMD.

New UMD Text

Triggering a GPI Out

To Trigger a GPI Out:

1. Configure XEdit's **GPI Line Direction** to be an output (done using the system calibration filter).
2. Assign an action to toggle the **GPI ON/OFF** to a widget.
3. Export the **Database** to the Kaleido-X.
4. Trigger the **Action** by clicking the widget using the RCP2s mouse.

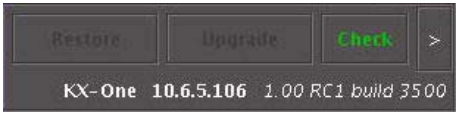
The GPI state changes.

Note: GPI Lines configured as Outputs can have their state set manually for test purposes in the System tab of XEdit using the Calibration filter.

Obtaining IP Addresses and System Names

To Obtain an IP Address and System Name:

1. Move the **Kaleido-X Cursor** to the bottom right corner of any display.
   After two seconds, the Monitor Wall Dashboard appear.



Monitor Wall Dashboard

Note: The dashboard contains: System name, Frame IP address and the software version.

Triggering Audio Monitoring using the RCP2

To Trigger audio monitoring using the RCP2:

1. Move the mouse cursor above a specific monitor and press **Audio Monitoring** on the **RCP2**.
   This shall select the first Audio Level inside the channel that the monitor is assigned to. Alternatively, the user can choose to monitor a specific Audio Level. This can be achieved by the following step.
2. Move the mouse cursor above a specific Audio meter inside a specific Monitor and then press Audio Monitoring on the RCP2.

Triggering Audio Monitoring using an Action

To Trigger audio monitoring using an action:

1. Select an audio source to monitor by using an **Audio Monitor** action.
   This action can be assigned to a widget on the Monitor wall and then triggered as any other action.

Configuring Internal Router Control on the Monitor Wall

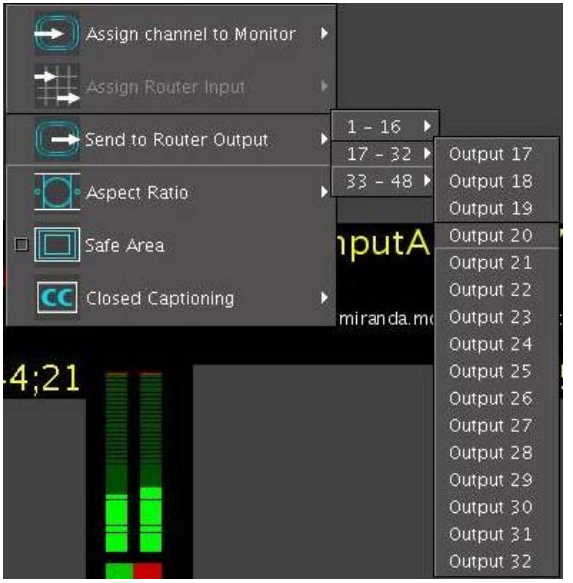
To configure the Internal Router Control on the Monitor Wall:

1. Right-Click on the **Monitor Wall** video source.

   The Right-Click menu appear.

   Right-Click menu

2. Select **Send to Router Output|Router|Output Number.**



   Selected Output number

   The Video Source is duplicated and sent to the selected Output location.

3 Creating Layouts

XEdit is a software intended to be run on a remote computer. Its purpose is to create and apply the necessary configuration for layouts, rooms, system, channels, and RCP user definitions as required for successful operation of the Kaleido-X.

Summary

Overview *51*
Checklist *52*
Key Concepts *52*
Detailed Directions *53*

Overview

In this section, you learn:

- "To start the XEdit software:" on page 53
- "To connect to a Kaleido-X Frame:" on page 55
- "To disconnect from a Kaleido-X Frame:" on page 57
- "To import a database:" on page 57
- "To export a database:" on page 59

• "To create a backup:" on page 61

• "To retrieve a backup:" on page 62

In this section, you will be able to answer the following questions:

• "What is the Kaleido-X?" on page 52

• "What is a database?" on page 53

• "What is a Database Preference window?" on page 53

Checklist

XEdit User Guide Task List

Follow these steps to complete all the tasks required to get started using XEdit:

1. Starting the XEdit software. Refer to "Starting the XEdit Software" on page 51.
2. Connecting to a Kaleido-X Frame. Refer to "Connecting to a Kaleido-X Frame" on page 55
3. Disconnecting from a Kaleido-X Frame. Refer to "Disconnecting from a Kaleido-X Frame" on page 57
4. Importing a database. Refer to "Importing a Database" on page 53
5. Exporting a database. Refer to "Exporting a Database" on page 55.
6. Creating a Backup. Refer to "Creating a Backup" on page 57.
7. Retrieve Backup. Refer to "Retrieving a Backup" on page 58.

Key Concepts

Kaleido-X

What is the Kaleido-X?

Kaleido-X is a multi-room, multi-image processor and router that is comprised of a single, expandable chassis. As a multi-image processor, each chassis can display 96 HD, SD or Analog inputs any number of times, in any size, across 8 displays of any resolution and orientation. As a router, it offers switching of 96 unprocessed inputs to 48 HD/SD outputs for feeding monitors, test equipment and master control or production switchers.

Database

What is a database?

A database is what is exchanged between the XEdit application and the Kaleido-X frame during an export or an import. For changes made in XEdit to take effect on the Monitor Wall, the database must be exported to the Kaleido-X.

Database Preference Window

What is a Database Preference window?

A database preference window is where the user can select the location of the local database on the PC running XEdit. Changes made using XEdit are normally done on that local database.

Detailed Directions

Starting the XEdit Software

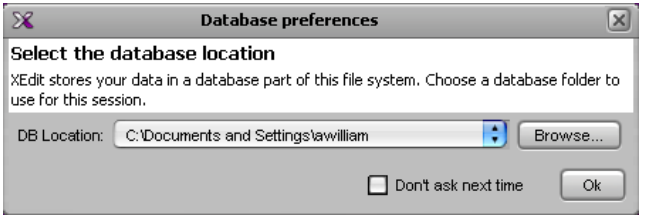
To start the XEdit software:

1. Double-click on the **XEdit** desktop icon

.

   Initially, the XEdit Start-Up window appears and then the Database Preference window appears.

XEdit Start-Up window

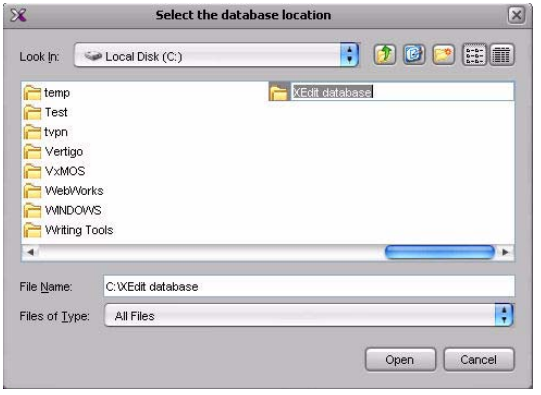

Database preferences
Select the database location
XEdit stores your data in a database part of this file system. Choose a database folder to use for this session.
DB Location:
C:\Documents and Settings\awilliam
Browse...
Don't ask next time
Ok

Database Preference window

2. Click **Browse,** if the **DB location** field is blank or if you would like to change the appearing database location.

   The Select the Database Location window appears.

Note: This emplacement doesn't have much impact on file management, in fact, this folder will be use to save data temporarily while you are building your database. If you need to build multiple databases, you should use the same emplacement but use the backup database tool to save them as separated files. You can then jump from one database to another by using the retrieve backup tool.

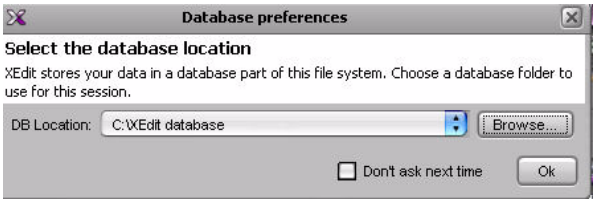


Database Location window selection

3. Locate and select the folder where database resides.
4. Click **Open**.

   Create this folder if it does not exist.

   The Database Preference window appears.

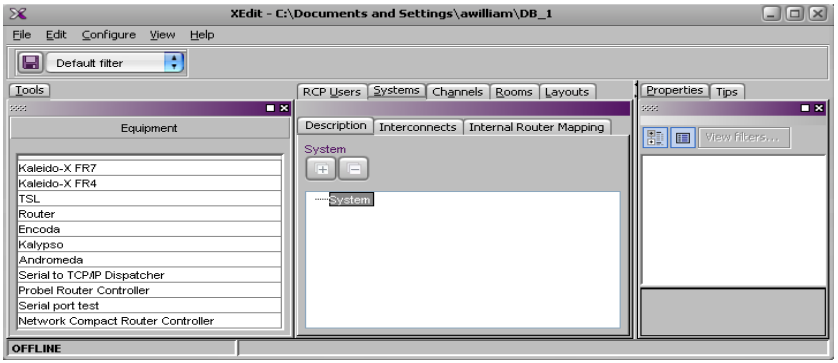

Database preferences
Select the database location
XEdit stores your data in a database part of this file system. Choose a database folder to use for this session.
DB Location:
C:\XEdit database
Browse...
Don't ask next time
Ok

Database Preference window with selected folder

5. Click **OK.**

   The **XEdit** main window appears.

   This may take a few seconds.



XEdit main window

Connecting to a Kaleido-X Frame

Note: Certain database functions are disabled, such as Export, Import, and Retrieve backup.

To connect to a Kaleido-X Frame:

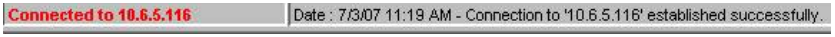
1. Repeat steps 1to 5 from **Starting the XEdit Software** instruction set.
2. Click **Config|Connect** from the main application menu.

   The **IP Address** window appears.

IP Address window

3. Enter the **Remote IP Address.**
4. Click **OK.**

   XEdit displays the connection status at the bottom left of the software application.



XEdit Connected status

XEdit Online

Any changes performed when “Connected”, are only stored in the corresponding Kaleido-X database. When disconnected from the Kaleido-X or "OFFLINE", all user modification reflected in the workspace requires a **Database Import** from the Kaleido-X frame. **See Importing a Database.**

The XEdit Online function is not limited to the system tasks, therefore changes can also be made to the Channel, Room, Layout and RCP user tasks.

XEdit Online Systems Task Modifications

When connected to a Kaleido-X, it is possible to make changes within the **Systems** tasks and save those changes. The changes take effect immediately as if the database was exported. **See Exporting a Database.**

Note: If connected to a Kaleido-X frame, and a Layout in XEdit is opened by a User 1 and is also being modified by User 2, a popup message appears asking User 1if the layout should be reloaded. By clicking yes, the layout is reloaded with the changes from User 2.

Note: When you are connected online with the Kaleido-X, you cannot use the Export or Import function. The changes will not be saved onto the User PC, but only saved on the Kaleido-X. TO recuperate the database from the Kaleido-X, disconnect from the Kaleido-X and use the Import function

Disconnecting from a Kaleido-X Frame

To disconnect from a Kaleido-X Frame:

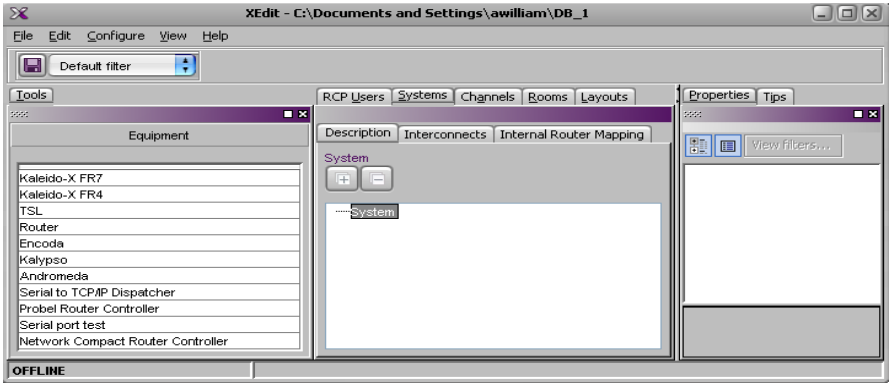
1. Repeat steps 1to 5 from **Starting the XEdit Software** instruction set.
2. Click **Config|Disconnect** from the main application menu.
   XEdit displays the **Offline** status at the bottom left of the software application.

XEdit Offline status

Importing a Database

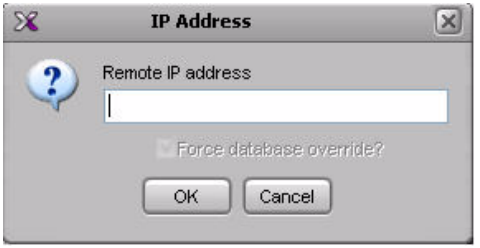
To import a database:

1. Select **Configure|Database|Import** from **XEdit** main window menu.



XEdit Main window

The Remote IP Address window appears.



IP Address window

2. Type the **Frame IP Address** for Kaleido-X, that you would like to import from the **Remote IP Address** window
3. Click **OK.**

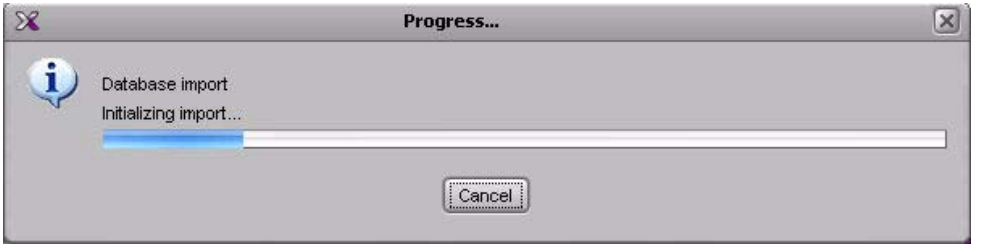
   An Import Verification window appears.

Import Database confirmation window

4. Click **Yes**.

   The Database Import Progress window immediately appears followed by the **Import Succeeded** window.

   The remote database is imported and replaces the local database.



Database Import Progress window

Import Succeeded window

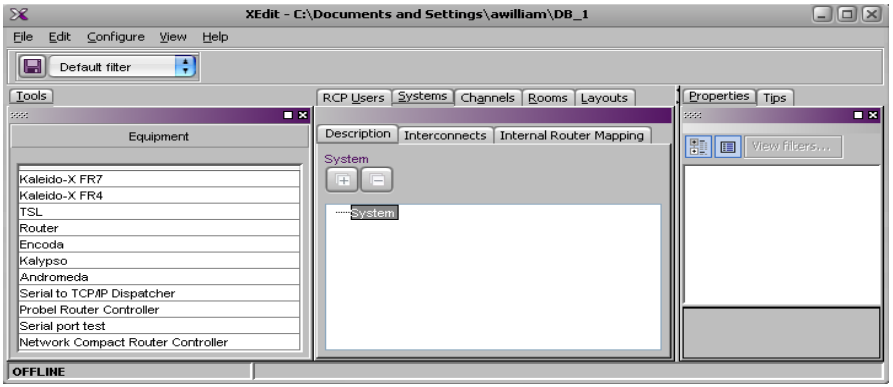
5. Click **OK**.

   The Database Import has successfully completed.

Exporting a Database

To export a database:

1. Select **Configure|Database|Export** from XEdit main window menu.



XEdit Main window

The Remote IP Address window appears.

IP Address window

2. Type the **Frame IP Address** for Kaleido-X, that you would like to export to the **Remote IP Address** window.

Export Succeeded window

5. Click **OK**.

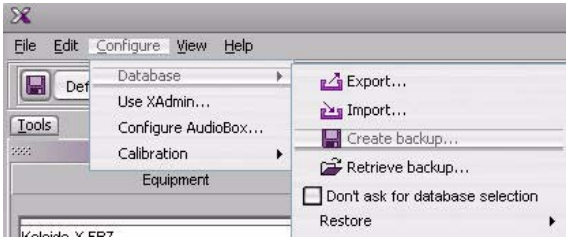
   The database export has successfully completed.

Creating a Backup

Note: To save a copy of a Kaleido-X database, you must use the Create backup and Retrieve backup functions. This is the equivalent to use the save as and Open functions and they will be useful when switching from one database to another.

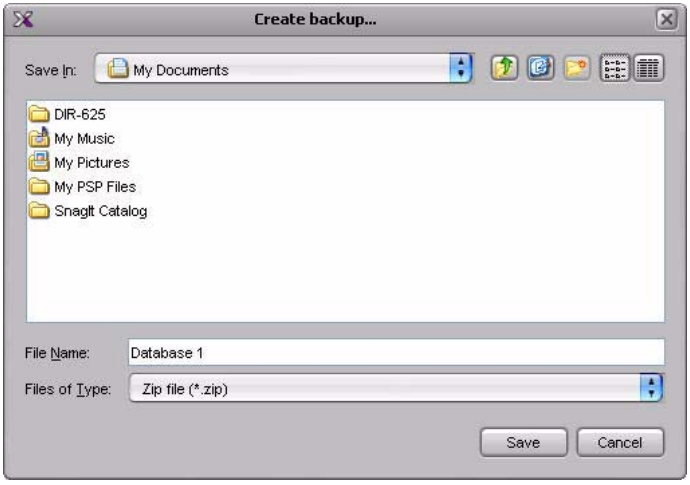
To create a backup:

1. Select **Configure|Database|Create backup** from **XEdit** main window menu.



Create a backup selection

2. Select the location and the file name of the database backup from the **Create Backup** dialog.



Create backup window

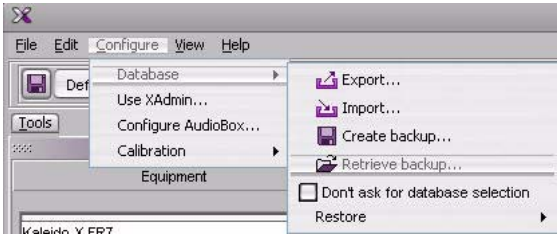
3. Click the Save button in the dialog.

   The database is saved as a .zip file.

Retrieving a Backup

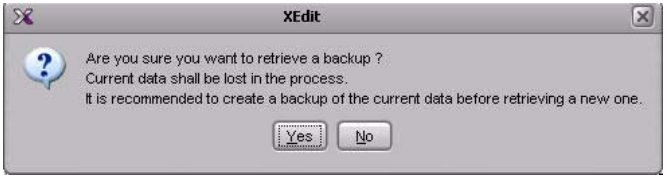
To retrieve a backup:

1. Select **Configure|Database|Retrieve backup** from **XEdit** main window menu.



Retrieve backup window

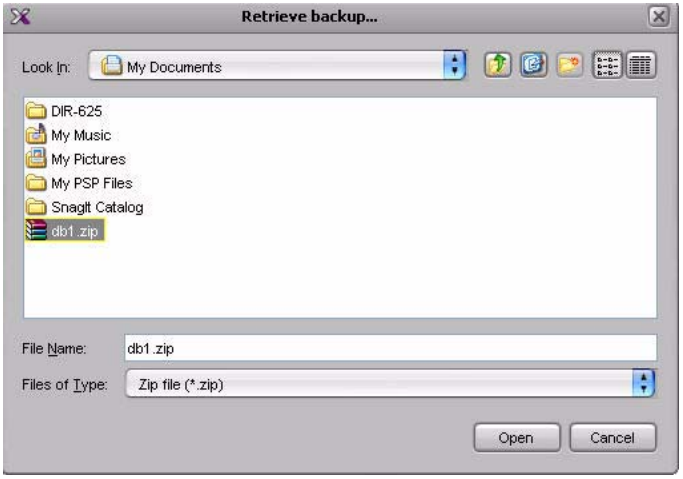
The XEdit Retrieve backup warning message appears.


XEdit
Are you sure you want to retrieve a backup ?
Current data shall be lost in the process.
It is recommended to create a backup of the current data before retrieving a new one.
Yes
No

XEdit Retrieve backup warning

2. Click **Yes**.

   The Retrieve backup location dialog appears.



Retrieve backup location window

3. Select the **Database** .zip file.
4. Click **Open**.

Note: Once an XEdit backup is retrieved the current user data is permanently lost. Always create a backup of the current user data before retrieving a new one.

Overview

In this section, you learn:

• "To create a system:" on page 68

• "To configure a system:" on page 70

• "To obtain Kaleido-X FR4 factories:" on page 72

• "To use a serial port test 3rd party device:" on page 73

• "To configure calibration:" on page 74

• "To calibrate a KXI-16HSV audio source:" on page 75

• "To calibrate an ABT audio source:" on page 76

• "To calibrate router field selection switching:" on page 77

• "To calibrate reclocking:" on page 78

• "To configure alarm threshold:" on page 79

• "To configure alarm debouncing:" on page 80

• "To configure the network router panel integration:" on page 80

• "To configure Internal Router Control:" on page 82

In this section, you will be able to answer the following questions:

• "What is calibration and when is it used?" on page 65

• "What is a system?" on page 65

• "What cards are supported by XEdit?" on page 66

• "What is a third party device?" on page 66

• "What are physical assignments?" on page 66

Checklist

XEdit User Guide Task List

Follow these steps to complete all the tasks required to get started using XEdit:

1. Create a System. Refer to “Creating a System” on page 63.
2. Configure a System. Refer to “Configuring a System” on page 65.
3. Importing a database. Refer to “Obtaining Kaleido-X FR4 Factories” on page 67
4. Using the Serial Port Test 3rd Party Device. Refer to “Serial Port Test 3rd Party Device” on page 68.
5. Configuring Calibration. Refer to “Configuring Calibration” on page 69.
6. Configuring Alarm Threshold. Refer to “Configuring Alarm Threshold” on page 74.
7. Configuring Alarm Debouncing. Refer to “Configuring Alarm Debouncing” on page 75.
8. Configuring the Network Router Panel Integration. Refer to “Configuring the Network Router Panel Integration” on page 75.
9. Configuring Internal Router Control. Refer to “Configuring Internal Router Control” on page 77

Key Concepts

Calibration

What is calibration and when is it used?

Calibration refers to the assignment of different card attributes. For example, the output card handles the Brightness and Contrast attributes and the Input card handles the Silence threshold attribute.

System

What is a system?

A system is a grouping of equipment. Only one system can exist per database.

Alarm Debouncing

What is Alarm Debouncing?

Alarm debouncing allows the filtering of false alarms. To filter these false alarms the tree parameters can be calibrated, they include The Duration, The Occurrences and The Detection Window

An alarm occurrence (not the alarm itself) is triggered when the probe is in continuous error for The Duration seconds. The actual alarm is triggered when the number of occurrences is equal to The Occurrence

parameter inside The Detection Window. A triggered alarm will get back to normal state as soon as the probe returns a normal state. Alarm occurrences that are older than The Detection Window are discarded.

Default values are: Duration = 5 sec., Occurrence = 3, Detection Window = 1 min.

Cards

What cards are supported by XEdit?

Cards are added and removed from the Kaleido-X frame. There are four types of cards:

- Input cards
- Output cards
- GPI/Genlock card
- Router cards

Third Party Devices

What is a third party device?

A Third Party device is a external device (equipment) not produced by Miranda Technologies that can be connected to the Kaleido-X frame.

Physical Assignments

What are physical assignments?

Physical assignments are properties within a channel. These properties include audio and video. Each physical assignment is associated with one specific level. A physical assignment relates to a physical source to a specific level within a channel. For example, video 1 from input A could be assigned to Video level 2 of Channel 1.

Alarm State Definitions

What are alarm state definitions?

The Alarm State definitions within XEdit are as follows:

Normal or OK = No Alarm detected.

Warning or Minor= Alarm detected with Low Severity

Major = Alarm detected with Medium Severity

Error or Critical = Alarm detected with High Severity.

Disabled = Combines multiple conditions

- No alarm assigned to the status indicator

- Alarm exists but is disabled at the source by the user. The Kaleido-X has the ability to deactivate some alarms on the hardware itself;

- Alarm exists but was not reported yet. The software is waiting for the hardware or driver to update the alarm.

- Alarm that has been removed (or was never added). It can happen if the alarm reference in XEdit does not exist on the Kaleido-X. One example is if a KXI card is removed. All associated alarms will disappear and become disabled on the Kaleido-X.

- Could not get status. Failed to communicate with device to get status. It could happen for example, if we loose network connection. Another example is a loss of signal that would trigger a critical alarm for signal presence but unknown for all other alarms. The freeze or black status is Disabled if the signal is not present.

Global Alarm Concepts

What are Global Alarm Concepts?

(Channels)

This concept involves the alarms used within a channel. In each channel we can create multiple alarm levels, which are single alarm status entities. In many cases the user would like to know the status of all these alarms at the same time. This Global alarm combines all the statues of each alarm to generate a global overall status, where the most critical takes precedence. As a small example imagine we have three alarms and two of the alarms we accept while one was in Error, then the overall alarm status would be in Error.

Each channel will have one Global Alarm created for its alarms only. This alarm at the moment is not configurable and is not visible to the user in the Channels tab. It is only available as a selection when use in a Widget that supports it, like UMD or Status Alarm. It is a new entry in the drop down list that the user can select.

As a bonus feature the user can select this alarm as a status and as well as for its text value for text status. When any alarm is in Error this alarm's user readable named will contribute to the Global Alarm's text value. When selected for a UMD this value will show all the text values for all alarms currently in Error.

(Status Alarm Layouts)

The Status Alarm was added to enable the user to easily use and see the status of Global Alarm, but it is not limited to just this alarm. When any alarm is selected for this widget the status of the alarm will be

shown. When using as the Text Level Alarm, it will display the text value of the alarm, which is the user readable name.

In the case of the Global Alarm it will show the status of this alarm. When selected as the Text Level Alarm, it will show the text value of the alarms in Error. There are currently two display settings: Cycle and Marquee. Cycle will cycle each alarm's text one at a time. While the Marquee setting will scroll the alarm's text across the widget, it will show as many of the alarm's text as possible.

Furthermore, we can control the speed of the Cycling and the scroll rate of the Marquee through the Cycling period field, which is milli seconds.

Alarm Priority Definitions

Status	Priority
Normal	Least significant
Minor	
Major	Significant
Critical	
Disabled	Most significant

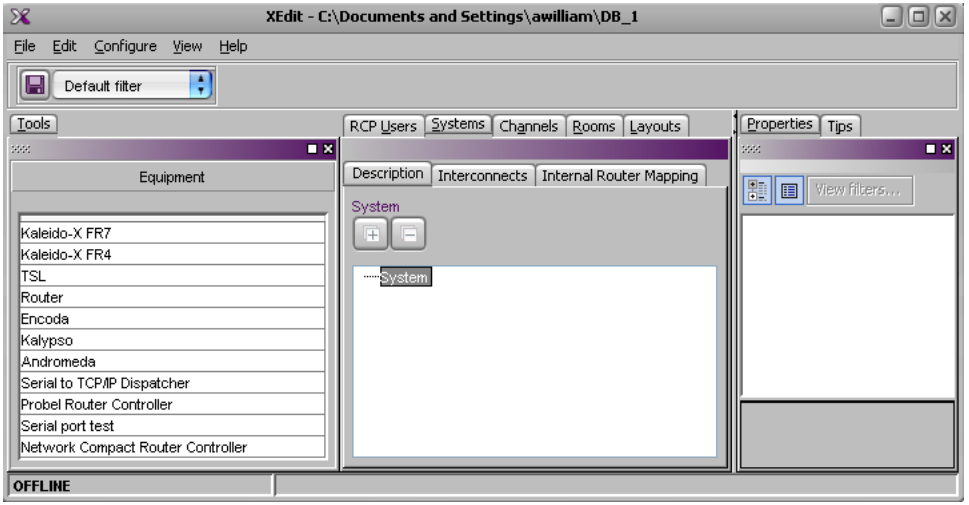
Detailed Directions

Creating a System

To create a system:

1. Select the **Systems** tab.

   The Systems tab appears with the center pane displaying a highlighted **System** in the tree.



XEdit main window - Equipment pane

2. Drag and drop either **Kaleido-X FR7** or the **Kaleido-X FR4** into the center pane's highlighted System or Right-Click on **System**.

3. Select the system of choice from the appearing menu.

   Kaleido-X FR7 or Kaleido-X FR4 appears in the center pane's System tree.

Note: Database created for an FR4 and an FR7 are not fully compatible. The selection of the proper frame is essential at this stage.

4. Drag and drop any third party devices that are to be included in the system or Right-Click on **System** and then select a third party device from the appearing menu.

Right-Click menu

All third party devices added to the system appears in the center pane's System tree.

5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

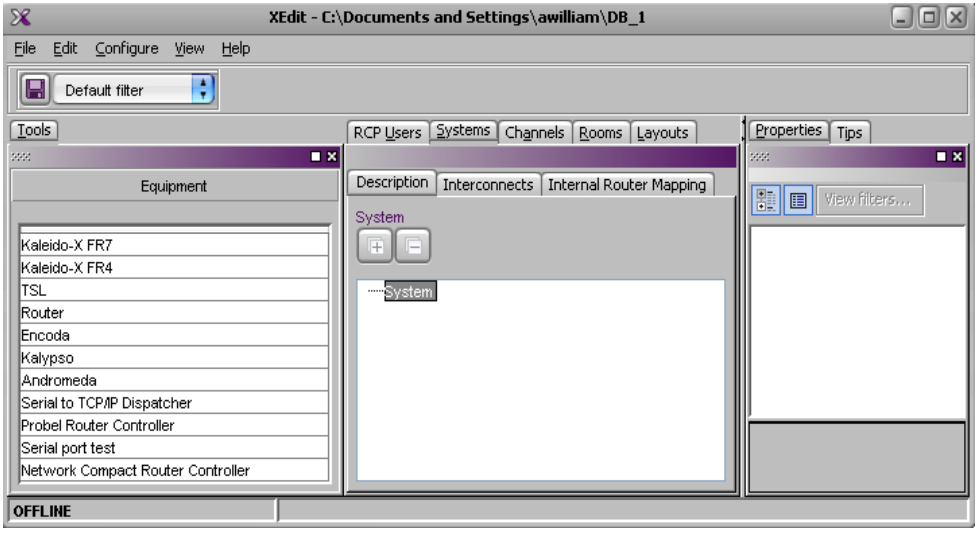
   Changes to the System are saved.

Configuring a System

To configure a system:

1. Select the **Systems** tab.

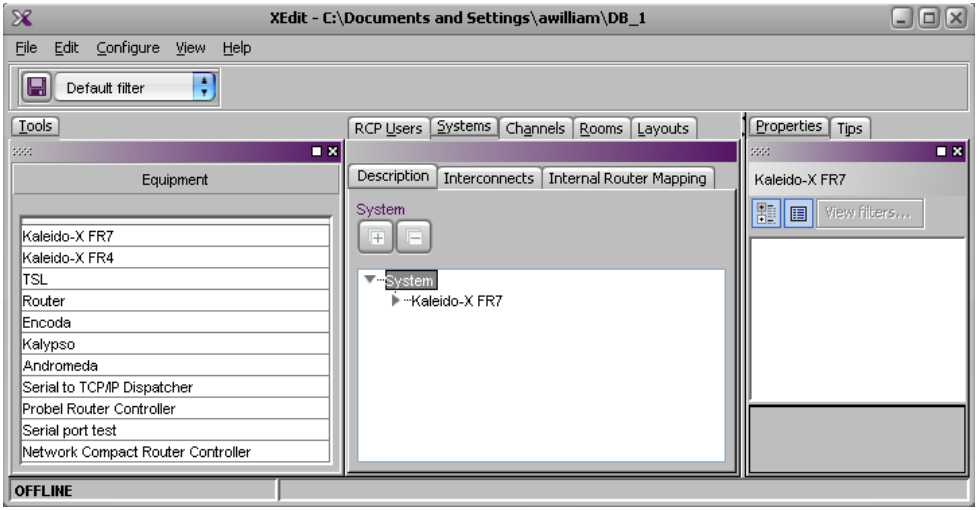
   The **Systems** tab appears with the center pane displaying a highlighted System in the tree.



XEdit main window - Equipment pane

2. Select the **Description** tab from **XEdit** main window in the center pane.

   The Description tab appears.



XEdit Main window with equipment added

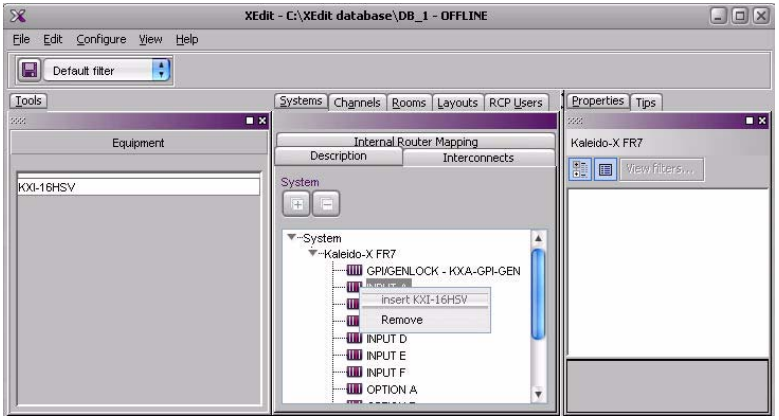
3. Expand the **Description** tab tree.

   The Kaleido-X frame slots appears in the tree.

4. Select a card slot from the tree.

5. Right-Click on the selected slot.

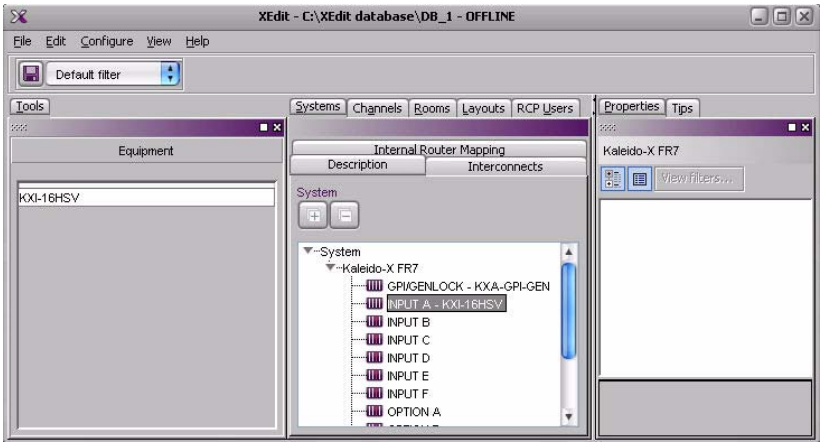
   A Right-Click menu appears.



XEdit slot Right-Click menu

6. Select the desired card for the slot from the appearing menu.

The new card information appears to the right of the appropriate slot in the tree.



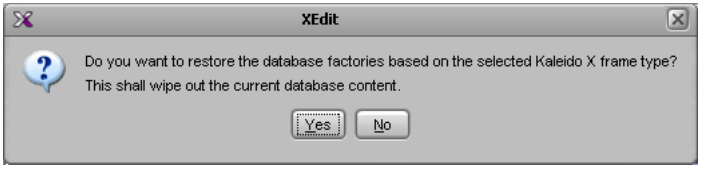
XEdit card appears after selection from slot Right-Click menu

7. Repeat steps 4 thru 6 for all necessary input and ouput slots, until they match up with the hardware configuration of the Kaleido-X frame you will be using.
8. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.
   All slot assignments are saved.

Obtaining Kaleido-X FR4 Factories

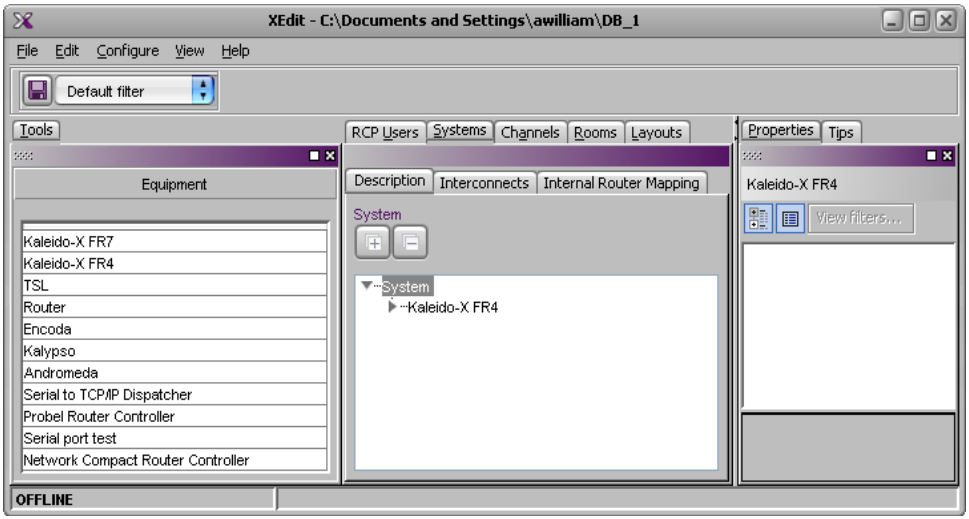
To obtain Kaleido-X FR4 factories:

1. Drop a **Kaleido-X FR4** frame onto the System tree node within the **Systems** task tab.
   The message dialog appears.


XEdit
Do you want to restore the database factories based on the selected Kaleido X frame type?
This shall wipe out the current database content.
Yes
No

XEdit Database Restore dialog

2. Click **Yes** or **NO** depending on **User's** database.
   The Kaleido-X FR4 appears within the system.



Kaleido-X FR4 system

3. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Kaleido-X FR4 Factory Defaults

Channels	Rooms	Layouts	RCP2
32	2	4	1

Serial Port Test 3rd Party Device

During a setup, it is not clear if the wiring between the Kaleido-X and a 3rd party is correct or if the 3rd sends expected data. One can connect a serial port test agent via XEdit, export the database and then read, via a web page, the data received on the serial port.

To use a serial port test 3rd party device:

1. Drag and drop **Serial Port Test** into the center pane's highlighted System or Right-Click on **System**.
2. Select **Serial Port Test** from the appearing menu.

   Serial Port Test appears in the center pane's System tree.
3. Click on the **Interconnect** tab in the center pane.

4. Connect it to the **Kaleido-X** by left-clicking and dragging the mouse from Serial Port Test to the **Kaleido-X** frame.
5. Select the output from the **Properties|Connections|RS-422 Com Port** on the far right.

   When connected, the Serial Port Test agent will log all data received from the serial port to a file accessible using a web browser.

   After an export, the serial test agent is started. The agent opens the serial port and start dumping any data received to a file available at http://*CARD_IP_Address*/logs/comm.log.

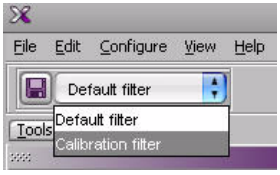
   Note: The *CARD_IP_Address* is the IP address of the card where the Serial Port Test is connected. The IP Address is located in XAdmin.

Configuring Calibration

To configure calibration:

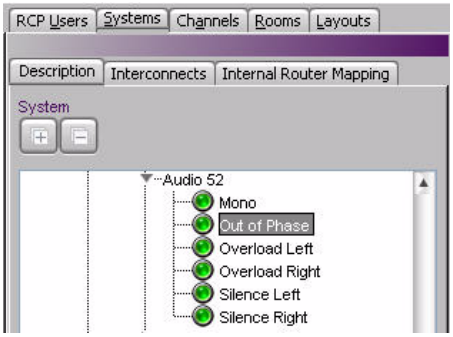
1. Select the **System** tab from the **XEdit** main window center pane.
2. Select **Configure|Calibration|Connect** if the user wants to apply the calibration changes in real-time. If the connection succeeds, "Connected to IP_ADDRESS" will appear in the application title bar.

   If Step 2 is omitted, then the user will need to export the database to apply the calibration changes.
3. Select and change from **Default Filter** to **Calibration Filter** at the top left of the XEdit main window.



Calibration Filter selection

4. Expand the **System** tree and select one of the System tree leaf node.
5. Use the **Properties** panel to edit the calibrations associated with currently selected tree leaf node.



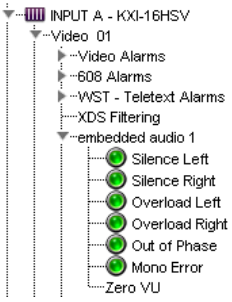
Selected Tree Leaf Node

6. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Calibrating the KXI 16HSV Embedded Audio for Zero VU Audio Source

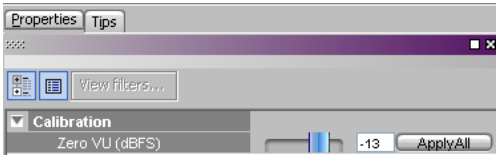
To calibrate a KXI-16HSV audio source:

1. Repeat the first 4 steps of the **Configuring Calibration** instruction set.
2. Select the **Zero VU** of either the embedded audio of the input **KXI-16HSV** audio.



KXI-16HSV Zero VU Audio selection

3. Click on the **Zero VU** leaf node under the KXI-HSV16.
4. Click on the Properties panel.
5. Click on the **Zero VU** slider under **Calibration** and move it from left to right to select the desired **dBFS** value.



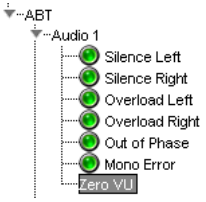
KXI-16HSV ABT Zero VU dBFS Value selection

6. Click **Apply All** to apply the desired **Zero VU dBFS** value throughout the system.
7. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Calibrating the KXI 16HSV ABT Zero VU Audio Source

To calibrate an ABT audio source:

1. Repeat the first 4 steps of the **Configuring Calibration** instruction set.
2. Select the **Zero VU** of either the embedded audio of the input **ABT** audio.



ABT Right Zero VU Audio Selection

3. Click on the **Zero VU** leaf node under the KXI-HSV16.
4. Click on the Properties panel.
5. Click on the **Zero VU** slider under **Calibration** and move it from left to right to select the desired **Zero VU dBFS** and the **Zero VU dBu** value.

KXI-16HSV ABT Zero VU dBFS Value selection

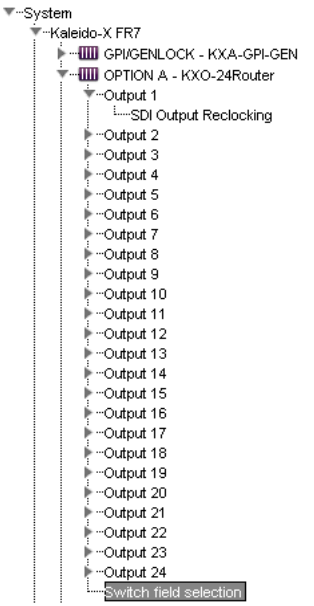
6. Click **Apply All** to apply the desired **Zero VU dBFS** and **Zero VU dBu** values throughout the system.
7. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Calibrating Router Field Selection Switching

To calibrate router field selection switching:

1. Repeat steps 1 and 3of the **Configuring Calibration** instruction set.
2. Select the **KXO-24 Router|Output1|Switch Field Selection**.

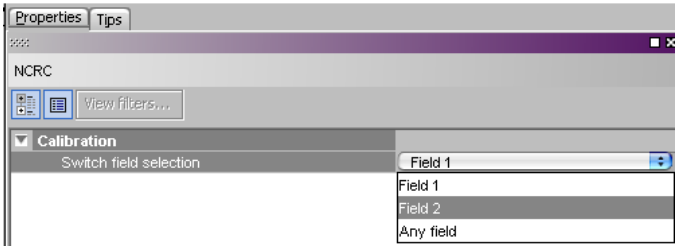
   The Switch Field Selection appears.



Router Field Selection Switching selection

3. Select **Calibration|Switch Field Selection** under the **Properties** panel on the far right.
4. Select the appropriate **Field**.

   The Field selection appears.



Switch Field Selection

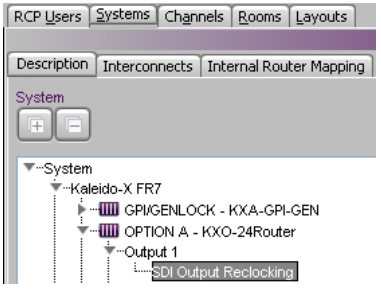
5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Calibrating Reclocking

To calibrate reclocking:

1. Repeat steps 1 and 3of the **Configuring Calibration** instruction set.
2. Select the **KXO-24 Router|Output1|SDI Output Reclocking.**

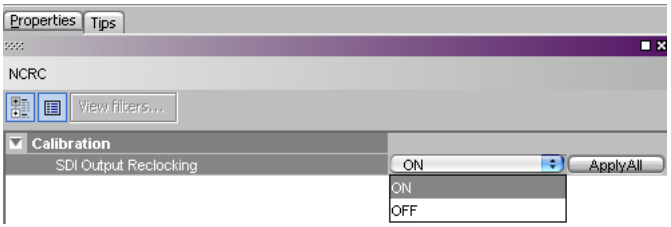
   SDI Output Reclocking selection appears.



SDI Output Reclocking selection

3. Select **Calibration|SDI Output Reclocking** under the **Properties** panel on the far right.
4. Select **ON**,**OFF** or **Apply All**.

   The SDI Output Reclocking On/ Off selection appears.



SDI Output Reclocking On/Off selection

5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Configuring Alarm Threshold

To configure alarm threshold:

1. Repeat steps 1 to 3 from **"Configuring Calibration"** instruction set.
2. Set the threshold value from left to right for that specific alarm until you have reached the desired setting.

   Overload (left/right): Select the level (in either dB, dBFS) above which audio will be considered overloaded.

   Silence (left/right): Select the level (in dB, dBFS) below which audio will be considered silenced.

   Out of Phase: Select the level below which audio will be considered out of phase. The sensitivity is between -1 and +1, where -1 means completely out of phase and +1 means perfectly in-phase.

   Mono: Select the level above which audio will be considered mono. The sensitivity is between -1 and +1, where -1 means completely out of phase and +1 means perfectly in-phase.

   Black Detection Threshold: set the level (in IRE or mV) below which the signal will be considered to be black.

   Luma Too High Detection Threshold: Define the level above which Luma Too High will be reported. Can be specified in IRE or mV.

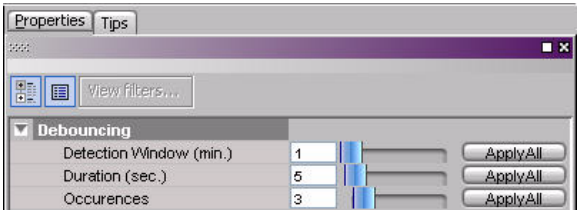
   Freeze Sensitivity: Freeze detection is done by comparing successive frames. Noise in the signal could disrupt this process, so filtering is added to remove it. Adjust the sensitivity to suit the signal being monitored (0 = Noisy, 100 = Clean).

Configuring Alarm Debouncing

To configure alarm debouncing:

1. Repeat steps 1 to 4 from **"Configuring Calibration"** instruction set

   The debouncing fields appears inside the Properties panel.



   Debouncing field

2. Left-click and move the slider to the right or left position under the **Debouncing** field for each calibration.

   Example: Audio Silence Left

   Calibration Threshold = -47dBFS

   Debouncing|Detection Window (min.)= 1

   Duration (sec.) = 5

   Occurrence = 2

   This all means if the audio left peak falls below the silence left threshold (-47 dBFS) and stays below this threshold for the duration (5 seconds), an error event will be flagged (note that this event is not an alarm). The actual Silence Left alarm will be triggered if we reach a number of flagged error events equal to the occurrence (2) within the detection window (1 minute).

3. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Configuring the Network Router Panel Integration

To configure the network router panel integration:

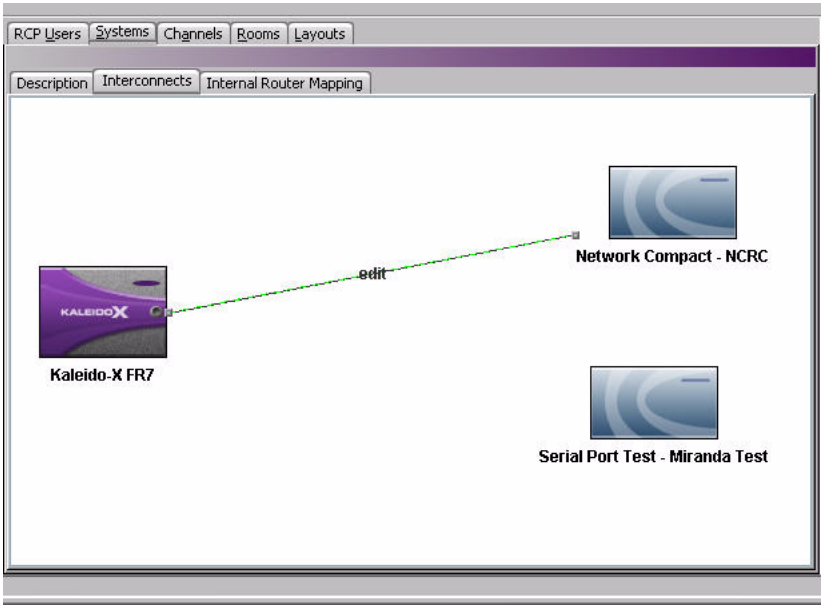
1. Repeat Step 1 from **Configuring a System** instruction set.
2. Drag the **Network Compact Router Controller** onto **System** in the center pane.

The input device identifier window appears.

Input Device Identifier window

3. Type the desired name in the window.
4. Click **OK.**
5. Click the Interconnect tab within the center pane.
6. Connect the **Network Compact Router Controller** to the **Kaleido-X** Fame by dragging the mouse from one towards the other.

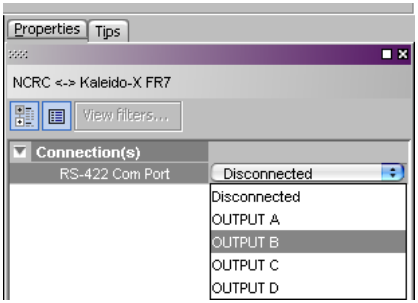
   The interconnection is complete.



Interconnection diagram

7. Click on the connection between the two devices.

8. Click on the **Properties Panel.**
9. Select the corresponding **Output** under **Connection|RS-422 Com Port**



Interconnection Output selection

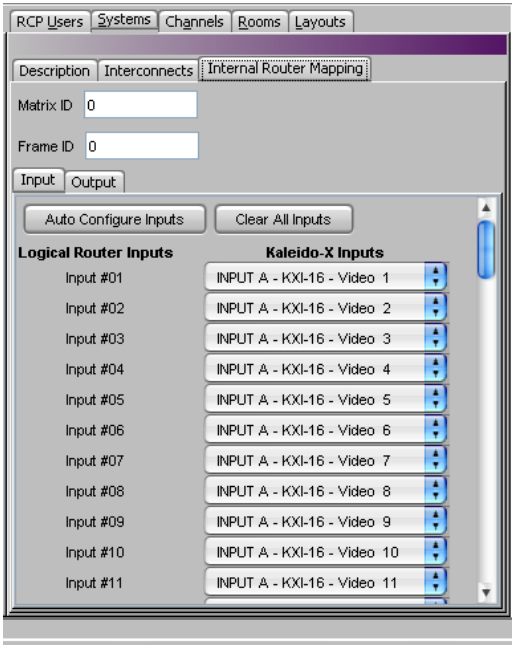
10. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Configuring Internal Router Control

Note: This configuration is required to make your internal router appears as a Probel switcher (SW-P-08 protocol) from a third party point of view. This step allow the configuration of the matrix, frame ID and also allows you to label inputs and outputs with consecutive numbering.

To configure Internal Router Control:

1. Repeat Step 1 from **Configuring a System** instruction set.
2. Click on **Internal Router Mapping.**
   The Internal Router Mapping central panel appears.



Internal Router Mapping panel

3. Click on the **Input** task tab.
4. Click the **Auto Configure Inputs** tab, or individually configure the **Input** as desired.
5. Click on the **Output** task tab.
6. Click the **Auto Configure Outputs** tab, or individually configure the **Outputs** as desired.
7. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Overview

In this section, you learn:

• "To create and configure a channel:" on page 85
• "To add levels:" on page 87
• "To configure Global Alarms:" on page 88

In this section, you will be able to answer the following questions:

• "What is a channel and when is it used?" on page 84

Checklist

XEdit User Guide Task List

Follow these steps to complete all the tasks required to get started using XEdit:

1. Creating and Configuring a Channel. Refer to "Creating and Configuring a Channel" on page 80.
2. Adding Levels. Refer to "Adding Levels" on page 82.
3. Configuring Global Alarms. Refer to "Configuring Global Alarms" on page 83

Key Concepts

Channel

What is a channel and when is it used?

A channel refers to a group of physical assignments. A channel is made up of *n* physical assignments. Each assignment is associated to one level.

Level

What is a level?

A level is a specific instance of the level category. For example, a video level category may have five (5) different levels. Each of these five different levels refers to a different type of video level within the video level category. This concept is also known as Logical Sources in the router domain where a level of video combined with multiple levels of audio and control ports becomes one entity.

Level Category

What is level category and when is it used?

Level category refers to the type of level. A level category contains between 1 and n levels. Examples of level categories are: video, audio, text, alarm, and time code.

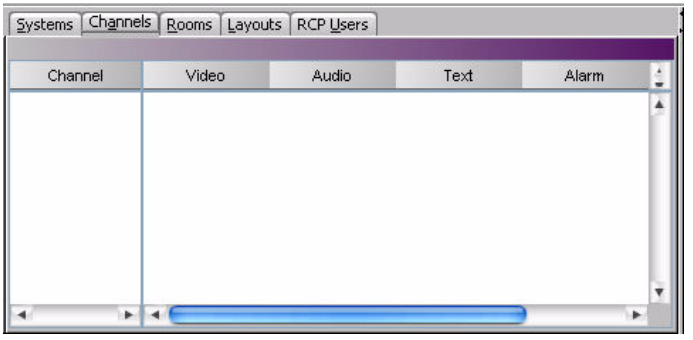
Detailed Directions

Creating and Configuring a Channel

To create and configure a channel:

1. Select the **Channels** button from the **XEdit** main window.

   The Channels button appears.



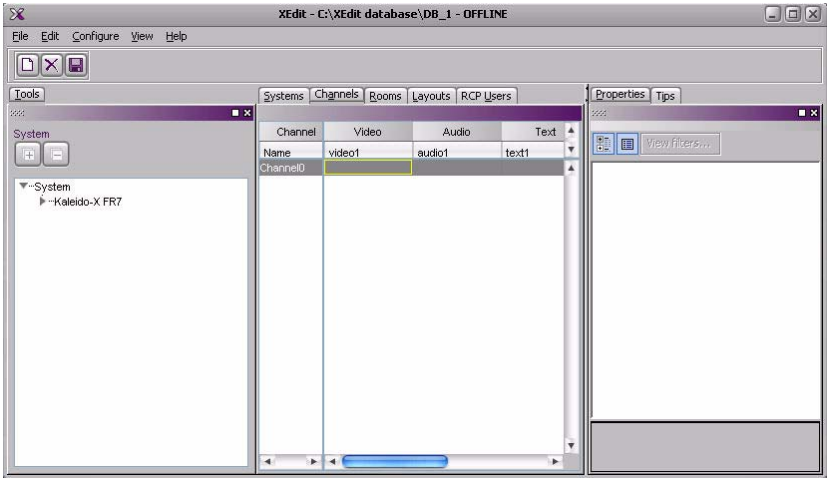
XEdit Channels button

2. Select **File|New** from the main menu.

   A new Channel is created in the Channel table.

3. Save the new **Channel** or continue to make physical assignments - required for creating a layout.

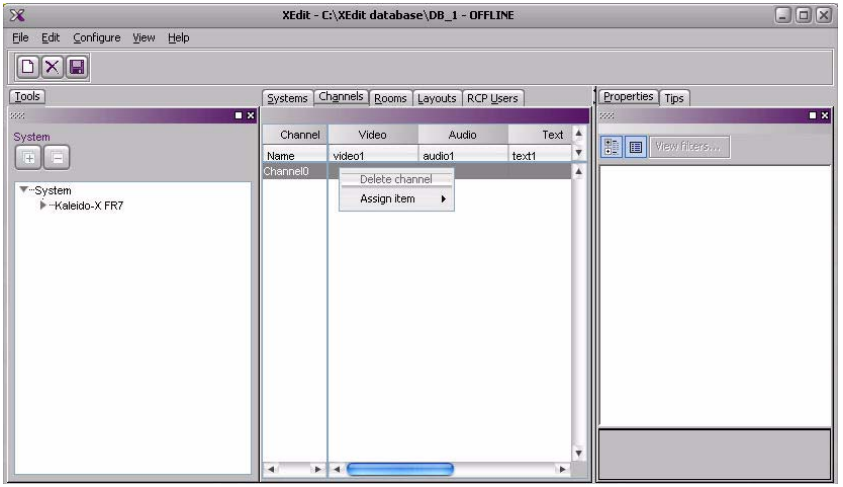
4. Select a column of the **Channels** button.



XEdit Channels button - column selected

5. Right-Click on the column selected in the previous step.

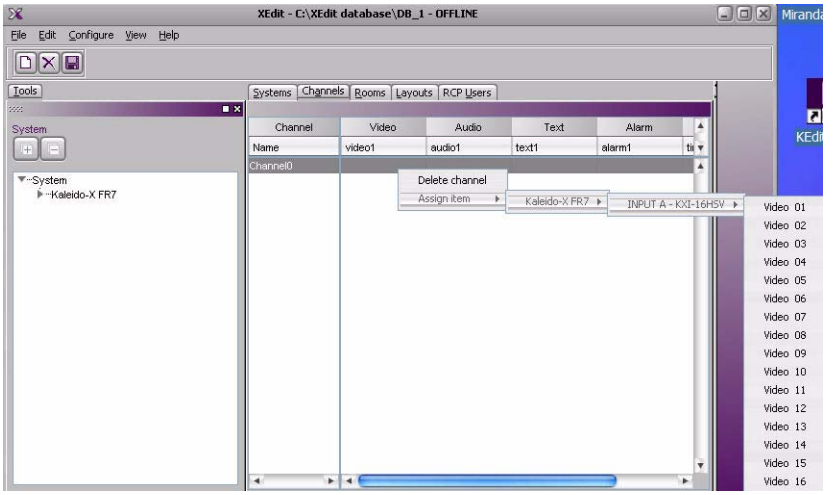
   A Right-Click menu appears.



XEdit Channels button - column Right-Click menu

6. From the Right-Click menu, select **Assign Item** followed by the appropriate physical assignment (For example, audio, video, text, alarm, or time code) as provided in the menu.

   For example, a possible selection could be **Assign Item|Kaleido-X FR7|Input A - Kaleido-X-16HSV|video 01**.



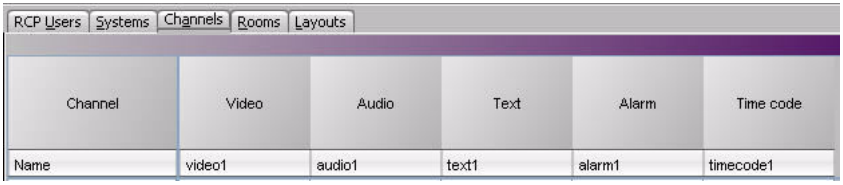
Right-Click menu - Assign Item physical assignment

7. Repeat steps 4 thru 6 as many times as necessary to create additional physical assignments.
8. Click **File|Save** or the **Save** button in the **XEdit** application toolbar.
   The Channel table is saved.

Adding Levels

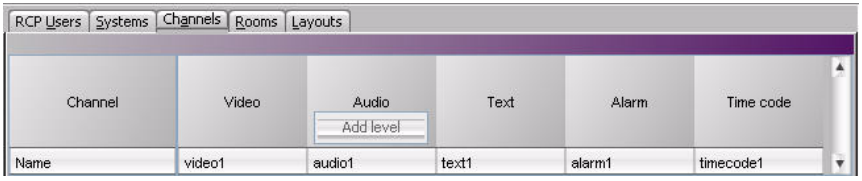
To add levels:

1. Select the **Channels** button from the **XEdit** main window.
   The Channels button Level categories appears.


RCP Users Systems Channels Rooms Layouts
Channel Video Audio Text Alarm Time code
Name video1 audio1 text1 alarm1 timecode1

Level categories

2. Right-Click on the **Level** category of choice.
   The Add Level option appears within the selected Level category.



Add Level option

3. Select **Add Level**.

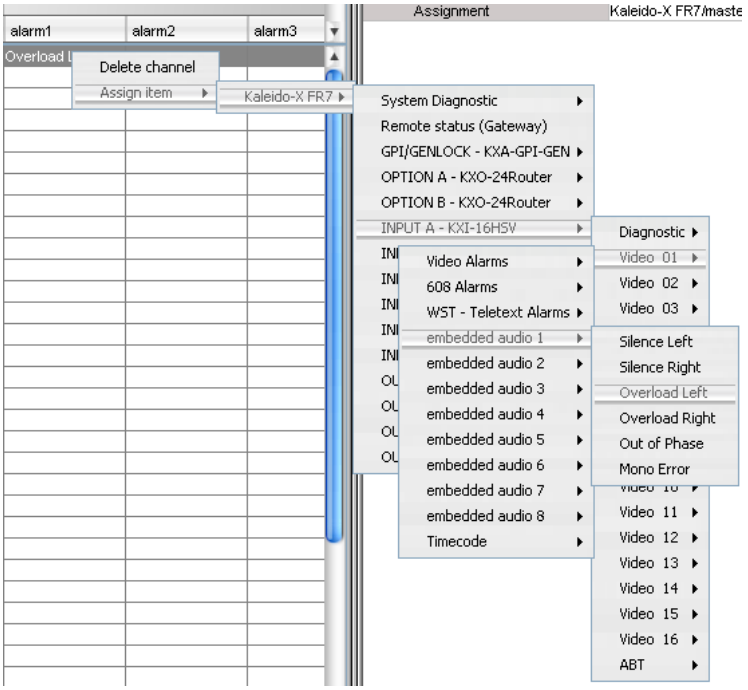
Note: You can change the level name by simply clicking on the **Properties Tab|Level Name** and replace the default name by deleting it and typing the name of choice.

4. Click **File|Save** or the **Save** button in the **XEdit** application toolbar.
   The channel table is saved.

Configuring Global Alarms

To configure Global Alarms:

1. Repeat Steps 1 in the **Adding Levels** instruction sets.
2. Select the **Input/Channel #** of choice.
3. Right-Click on the **Alarm Name** in the **Alarm Category**.
4. Select the desired input Alarm of choice using the following path **Assign Item|Kaleido-XFR7|Input A-KXI-16HSV|Video1|Video Alarms|Video Black.**



Global Alarms selection

5. Click **File|Save** or the **Save** button in the **XEdit** application toolbar.

Overview

In this section, you learn:

• "To create a room:" on page 92

• "To open an existing XEdit room:" on page 94

• "To create a display library:" on page 94

• "To enable the large mouse pointer:" on page 96

• "To assign a Head to a Display:" on page 99

• "To select the room display properties:" on page 100

• "To add displays to a room:" on page 98

- "To open an existing XEdit room:" on page 94
- "To assign a Head to a Display:" on page 99
- "To select the room display properties:" on page 100
- "To change a room display resolution:" on page 103
- "To change the aspect ratio:" on page 104
- "To change diagonal size:" on page 105
- "To change the height:" on page 106
- "To change the width:" on page 107
- "To change a room display rotation:" on page 108
- "To change the room display position:" on page 109

In this section, you will be able to answer the following questions:

- "What is a room?" on page 91
- "What is a fullscreen zone?" on page 91
- "What is a display library?" on page 91
- "What is a display in comparison to a monitor within the XEdit workflow?" on page 92

Checklist

XEdit User Guide Task List

Follow these steps to complete all the tasks required to get started using XEdit:

1. Create a room. Refer to "Creating a Room" on page 87.
2. Opening an existing XEdit Room. Refer to "Opening an existing XEdit Room" on page 89.
3. Enabling the Large Mouse Pointer. Refer to "Enabling the Large Mouse Pointer" on page 96
4. Add a display to a room. Refer to "Adding Displays to a Room" on page 90.
5. Assign a head to a display. Refer to"Assigning a Head to a Display" on page 92
6. Selecting Room Display Properties. Refer to "Selecting Room Display Properties" on page 92

7. Changing Room Display Resolution. Refer to “Changing Room Display Resolution” on page 93
8. Changing the Aspect Ratio. Refer to “Changing the Aspect Ratio” on page 104
9. Changing the Diagonal Size. Refer to “Changing the Diagonal Size” on page 95
10. Changing the Height. Refer to “Changing the Height” on page 95
11. Changing the Width. Refer to “Changing the Width” on page 96
12. Changing a Room Display Rotation. Refer to “Changing a Room Display Rotation” on page 97
13. Changing the Room Display Position. Refer to “Changing the Room Display Position” on page 98

Key Concepts

Room

What is a room?

A room is a visual grouping of displays that are meant to be used by one or multiple operators that are sharing the same room. The grouping of display creates a large virtual monitor wall that can will be seen as a single large display from an operator point of view. In this section, display resolution and size will be configured as well as user's zones that are used to display the full screen window.

Fullscreen Zone

What is a fullscreen zone?

A fullscreen zone is a sub-section of the entire room. It can be any size and it can be positioned on any of the displays in the room. The fullscreen zone is an area of the monitor wall that is reserved for the specific user it is assigned to. A fullscreen zone can be associated with one or more fullscreen layouts.

Display Library

What is a display library?

A display library contains a collection of predefined displays. Displays from a library can be used to help construct a room. More than one display library can exist.

Display versus Monitor

What is a display in comparison to a monitor within the XEdit workflow?

In the XEdit workflow, a display refers to the representation of a physical monitor (such as a CRT) within a room. In the XEdit workflow, A Monitor equals to a Composite widget period. A single video screen should be called a video window.

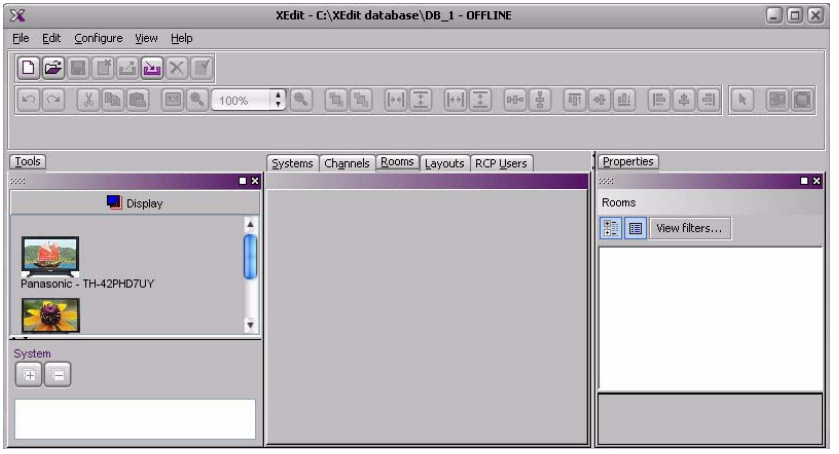
Detailed Directions

Creating a Room

To create a room:

1. From the **XEdit** main window, select the **Rooms** tab.

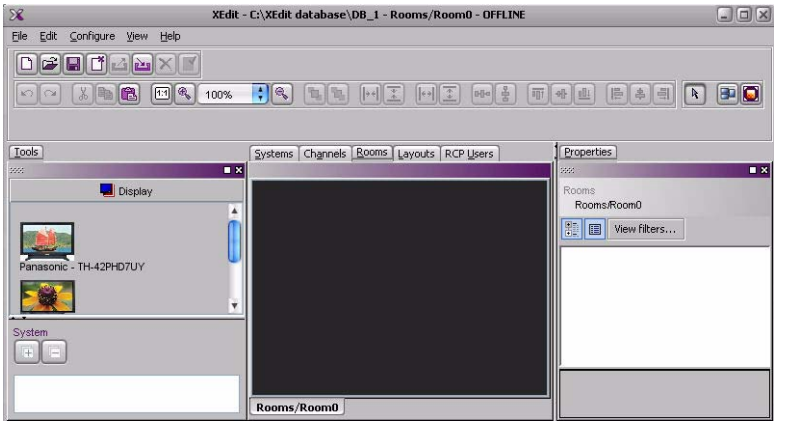
   The Rooms tab appears.



XEdit Rooms tab

2. From the main menu select **File|New**.

   The center pane becomes a room and appears empty and black with the room name displayed at the bottom of the pane.

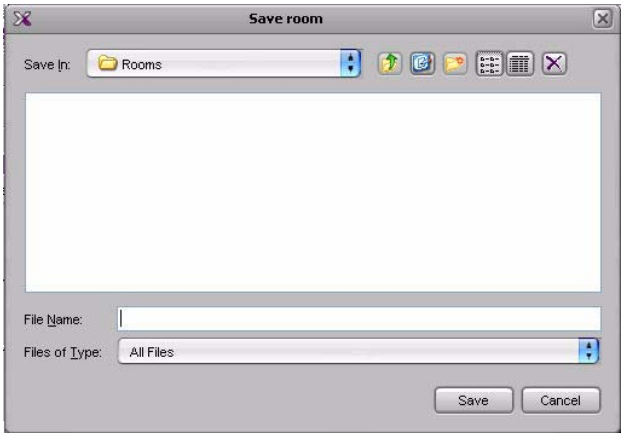


New Room window

3. Add displays to the **Room**.
4. Add **Fullscreen Zones** to the display.

   This step is optional.
5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

   The Save Room window appears.



Save Room window

6. Select a location and provide a name for the new **Room**.

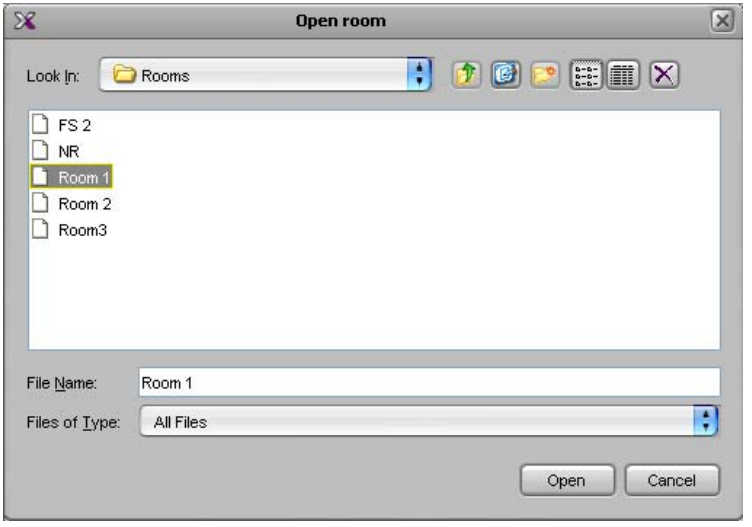
   The new Room is immediately saved as specified.

Opening an existing XEdit Room

To open an existing XEdit room:

1. Start the XEdit software. Refer to "To start the XEdit software:" on page 9.
2. Select the **Rooms** tab.
3. Select **File|Open**.

   The Open Room window appears.



Open Room window

4. Select the **Room.**
5. Click **Open**.

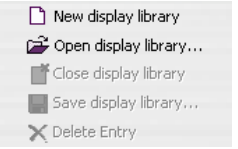
   The selected room appears in XEdit.
6. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Creating a Display Library

To create a display library:

1. Start the XEdit software. Refer to "To start the XEdit software:" on page 9.

2. Select the **Rooms** tab.
3. Right-click on the **Display Library** panel.
   The right-click menu appears.

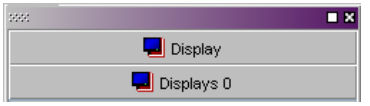


Right-click Display Library menu.

4. Click on the **New Display Library**.

Note: The same result can be obtained by selecting the same action from **File|New Display Library**.

The New Composite Widget library appears at the bottom of the Widget library.

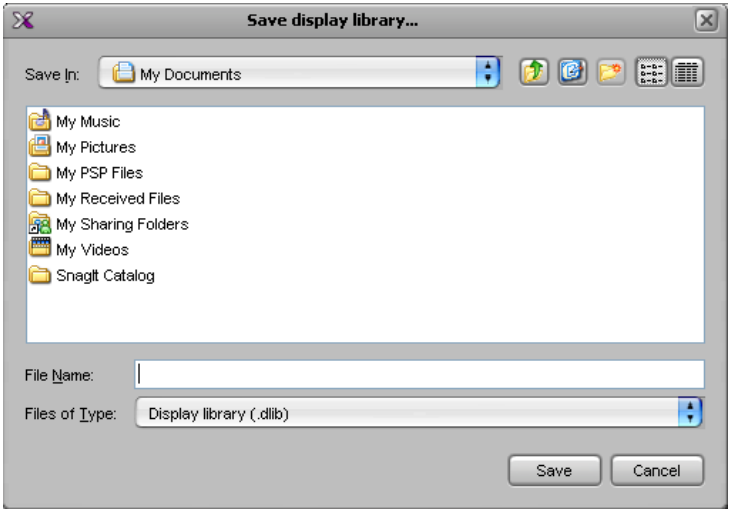


New Display

5. Click **File New** or **Open** an existing **Layout.**
6. Click on the **Display** Widget or choose one within an existing **Layout**, customize if necessary, then drag it (while holding the CTRL key) onto the widget library.

Note: It is not possible to customize a display once in the library.

7. Right-click in the library pane.
8. Select **Save Display Library**.
   The Save Display Library window appears.



Save Display Library window

9. Type the name of the **Display** in the **File Name** row of the **Save Display Library** window.
10. Click **Save**.

    The new Display in the library is now renamed and saved.

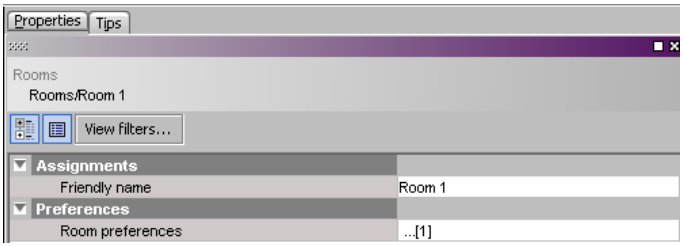
Note: Once the library is saved, right-click in the library pane and select Close Display Library. It is possible to reopen the created library by selecting Open Display Library from the right-click menu within the library. It is also possible to open more than one library at a time.

Enabling the Large Mouse Pointer

To enable the large mouse pointer:

1. Repeat step 1 from Creating a Room.
2. Select the **Properties** tab from the main application toolbar.

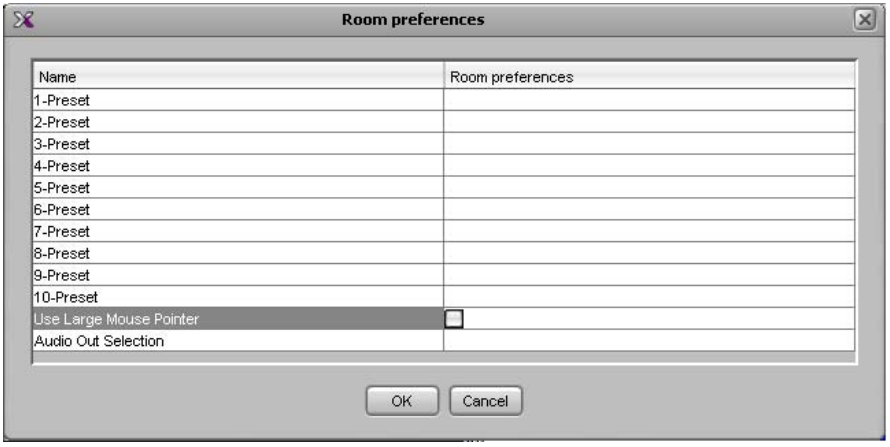
   The Room Preferences appears under the Properties Panel on the far right of the XEdit application.



Room Preferences

3. Click on the button in the Room Preferences.

   The Room Preferences window appears.



Room Preferences window

4. Check the **Use Large Mouse Pointer** box.

   The checked box appears.

Use Large Mouse Pointer checked box

5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

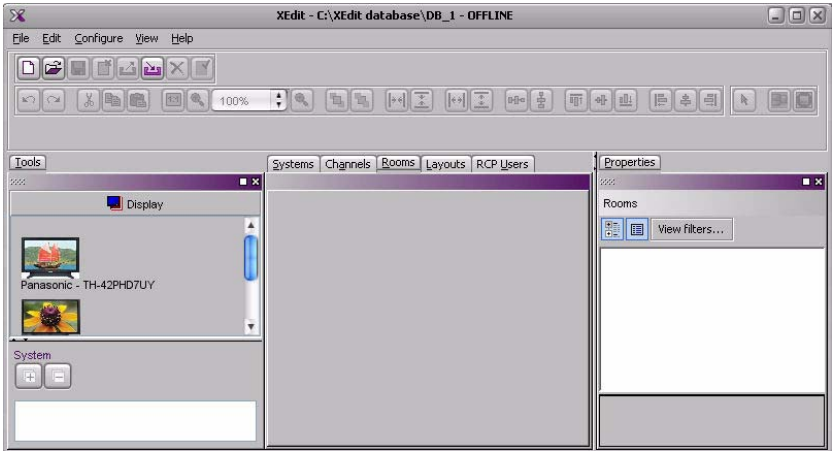
   The Large Mouse Pointer appears on the Kaleido-X Monitor Wall.

Adding Displays to a Room

To add displays to a room:

1. Select the **Rooms** tab from the **XEdit** main window.

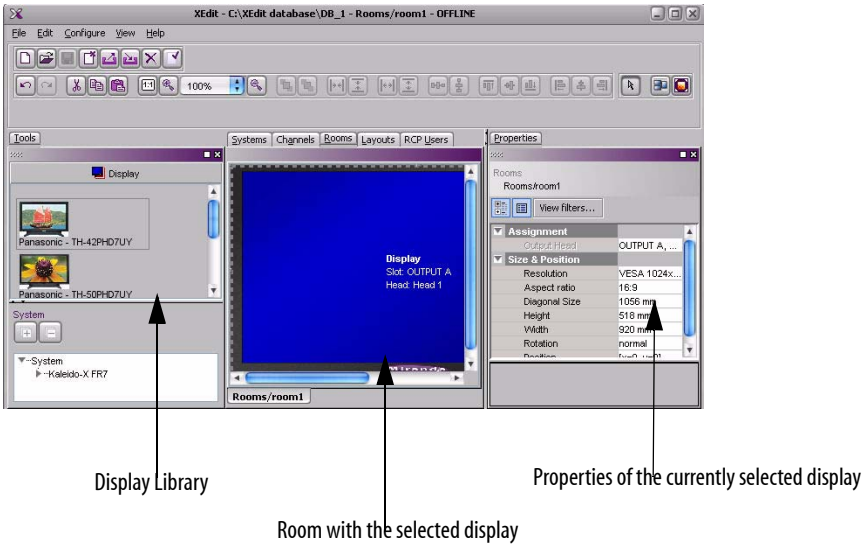
   The Rooms tab appears.



   XEdit Rooms tab

2. Open an existing **Room**.
3. Drag and drop displays from the display library into the room or create custom size displays by selecting the display widget button in the toolbar.

   All available display libraries display on the left side of your work area.



Room with a display

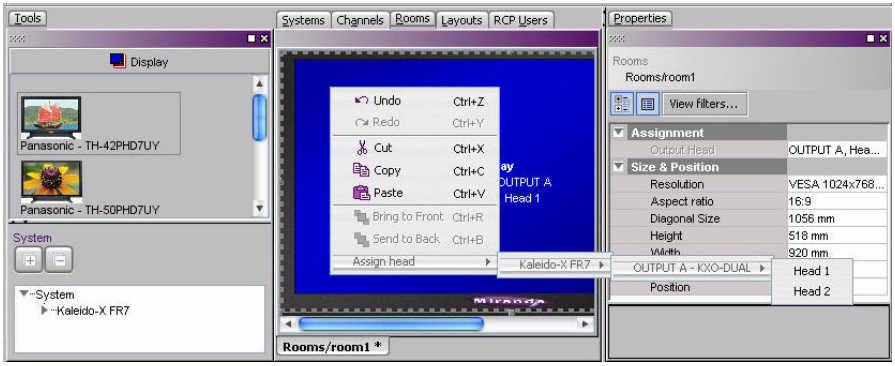
4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Assigning a Head to a Display

Note: One output head cannot be assigned to more than one display at a time. Rooms can only be saved once the output heads are properly assigned. A Room filename cannot exceed 7 characters.

To assign a Head to a Display:

1. Open an existing XEdit room that contains a display. Refer to "To open an existing XEdit room:" on page 94.
2. Select the display.
3. Right-Click on the selected display.
   A Right-Click menu appears.



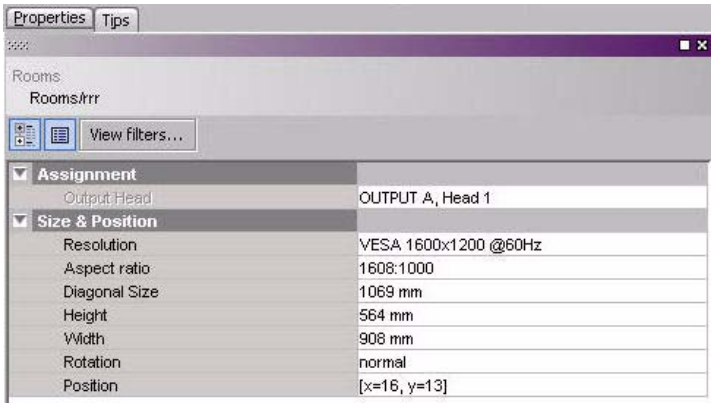
Display Right-Click menu

4. Select **Assign Head** from the Right-Click menu.
5. Select the head of the output card.
6. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.
   Changes to the room are immediately saved.

Selecting Room Display Properties

To select the room display properties:

1. Select the **Room** tab.
2. Open an existing **Room**.
3. Left click on the **Room Display.**
   The Properties panel displays the Room Display properties.



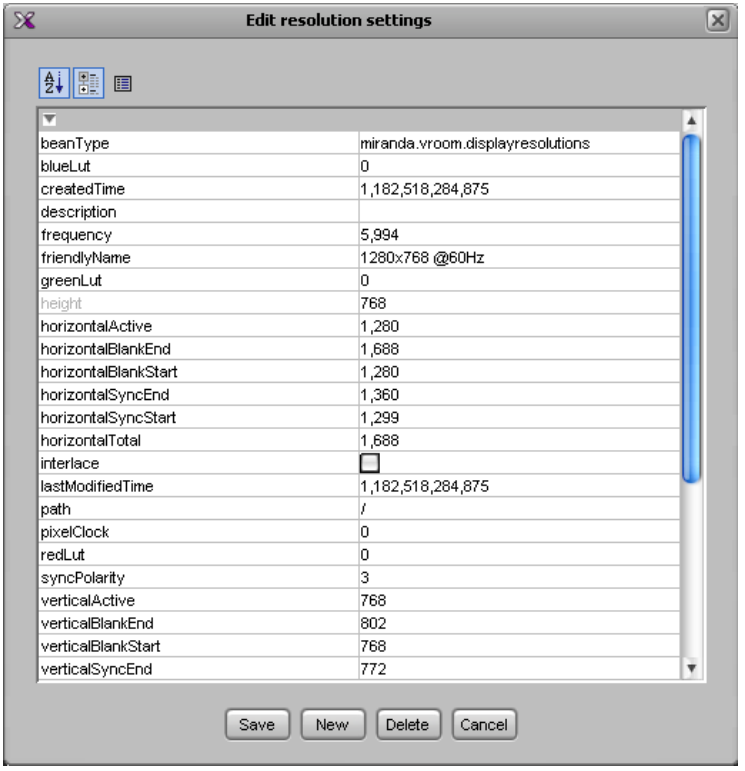
Room display properties

Creating a Room Display Resolution

To create a room display resolution:

1. Repeat the steps 1,2 and 3 from **Select the Room Display Properties** instruction set.
2. Click on the Room Display.
3. Select the **Resolution** properties on the far right.
4. Click on the button on the right of the resolution presets.

   The Edit Resolution Settings window appear.



Edit Resolution Settings window

5. Enter the frequency and timing found within the XAdmin page.

   Frequency must be entered either as 5.994 or 5.000 only.

Note: This information can be found at the following location by typing the following: http://10.6.5.116/XAdmin/. Also see Viewing the Frame Status Information of the Kaleido-X Frame.

6. Enter the required information found under the OUTPUT C or D: KXO-DUAL Master|Description.

   The image below shows the required information needed for entry within the Edit Resolution Settings window.

OUTPUT D : KXO-DUAL (s/n 079201-18372003) - Master	
Description	
KXO-DUAL - Display 90 Deg.Rotation Option	Enabled (Key: 4242134f) Disable
EDID DVI Out 1 - Frequency	59.95017128620368
EDID DVI Out 1 - Horizontal Active	1920
EDID DVI Out 1 - Horizontal Blank End	2080
EDID DVI Out 1 - Horizontal Blank Start	1920
EDID DVI Out 1 - Horizontal Sync End	2000
EDID DVI Out 1 - Horizontal Sync Start	1968
EDID DVI Out 1 - Horizontal Total	2080
EDID DVI Out 1 - Sync Polarity	1
EDID DVI Out 1 - Vertical Active	1200
EDID DVI Out 1 - Vertical Blank End	1235
EDID DVI Out 1 - Vertical Blank Start	1200
EDID DVI Out 1 - Vertical Sync End	1209
EDID DVI Out 1 - Vertical Sync Start	1203
EDID DVI Out 1 - Vertical Total	1235

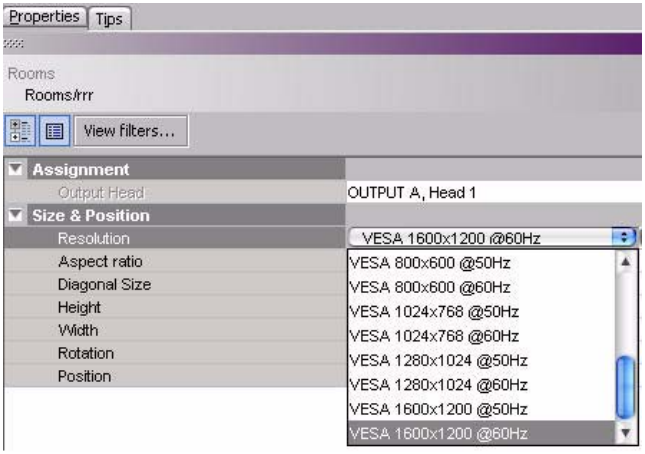
XAdmin Frequency & Timing information

7. Click **Save** on the **Edit Resolution Settings** window.

Changing Room Display Resolution

To change a room display resolution:

1. Repeat the steps 1,2 and 3 from **Select the Room Display Properties**.
2. Select the **Resolution** properties on the far right.
   The Resolution presets appears.



Resolution presets

3. Select the preferred **Display** resolution.

   The Room Display resolution is displayed.

Room Display resolution

4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

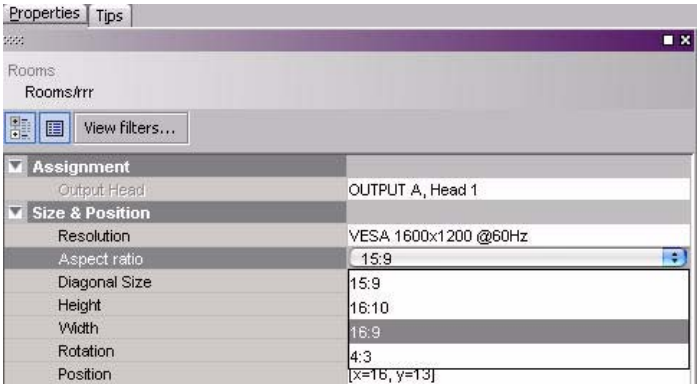
Changing the Aspect Ratio

Note: Make sure the aspect ratio of the display is properly set. This will have an impact on the ratio of each component inside the layout. If the aspect ratio of the display is not set properly here, the video window inside the layout will have the wring aspect ratio. If you change the aspect ratio later in the process after having created some layouts your layouts will be broken by this change.

To change the aspect ratio:

1. Repeat the steps 1, 2 and 3 of the **Selecting Room Display Attributes** section.
2. Select the **Aspect Ratio** properties on the far right.

   The Aspect Ratio presets appears.



Aspect Ratio properties

3. Select the preferred **Aspect Ratio**.

   The selected **Aspect Ratio** is displayed within the field.

Selected Aspect Ratio

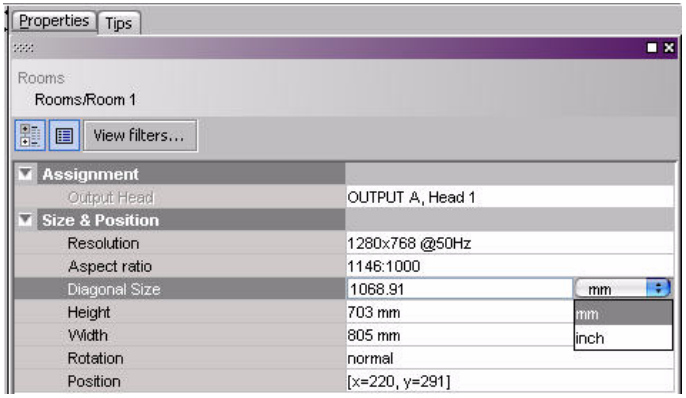
4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Changing the Diagonal Size

To change diagonal size:

1. Repeat the steps 1, 2 and 3 of the **Selecting Room Display Attributes** section.
2. Select the **Diagonal Size** properties on the far right.

   The Diagonal Size presets appears.



Diagonal Size

3. Enter the preferred **Diagonal Size**.
4. Select the desired unit of measurement located on the far right of the **Diagonal Size** field.

   The **Diagonal Size** is displayed within the field.

   The pull-down menu offers the choice of millimeters (mm) or inches (inch).

Selected Diagonal Size

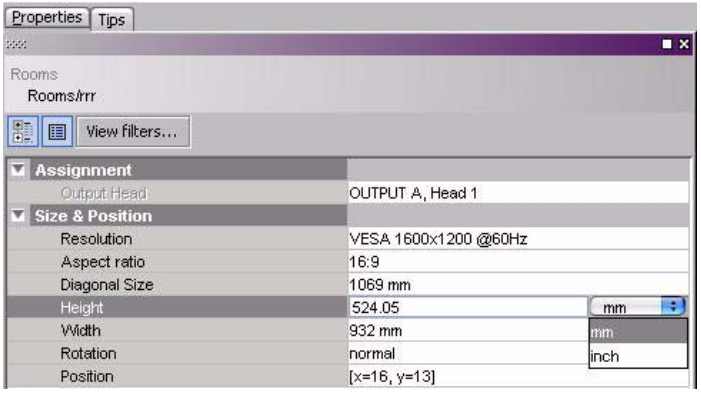
5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Changing the Height

To change the height:

1. Repeat the steps 1, 2 and 3 of the **Selecting Room Display Attributes** section.
2. Select the **Height** properties on the far right.

   The Height presets appears.



Height presets

3. Enter the preferred **Height**.
4. Select the desired unit of measurement located on the far right of the **Height** field.

   The **Height** is displayed within the field.

   The pull-down menu offers the choice of millimeters (mm) or inches (inch).

Selected Height and Units

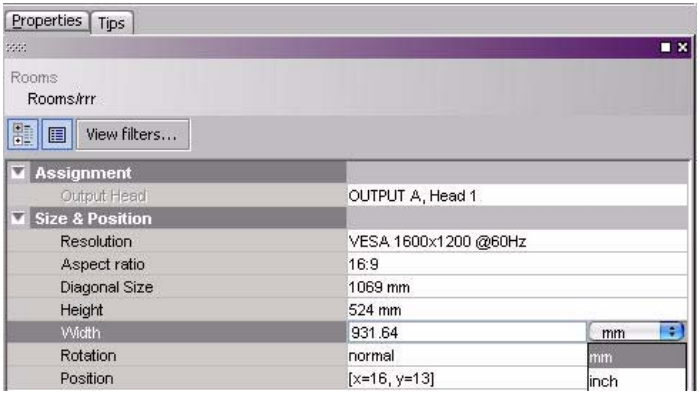
5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Changing the Width

To change the width:

1. Repeat the steps 1, 2 and 3 of the **Selecting Room Display Attributes** section.
2. Select the **Width** properties on the far right.

   The Width presets appears.



Width presets

3. Enter the preferred **Width** values.
4. Select the desired unit of measurement located on the far right of the **Width** field.

   The **Width** value is displayed within the field.

   The pull-down menu offers the choice of millimeters (mm) or inches (inch).

Selected Width values and units

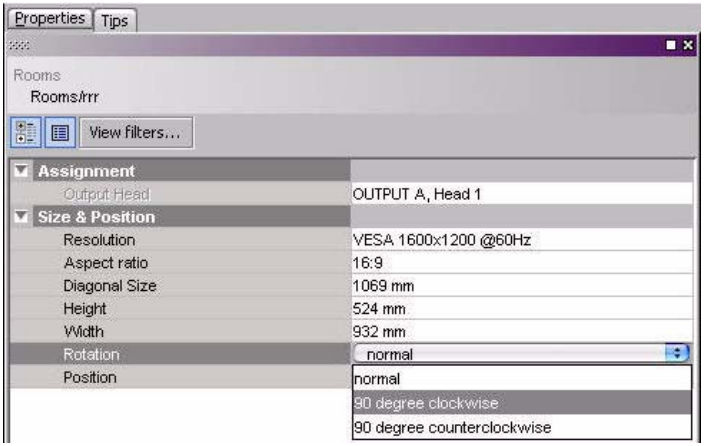
Changing a Room Display Rotation

Note: The KXS-ROTATOR option must be enabled on the KXO-DUAL card for rotation to work properly on the Monitor Wall. The option can be installed and verified via XAdmin.

To change a room display rotation:

1. Repeat the steps 1, 2 and 3 of the **Selecting Room Display Attributes** section.
2. Select the **Rotation** properties on the far right.

   The Rotation presets appears.



Room Display Rotation presets

3. Select the preferred **Rotation** presets.

   The selected Rotation presets are displayed within the field.

Selected Room Display Rotation presets.

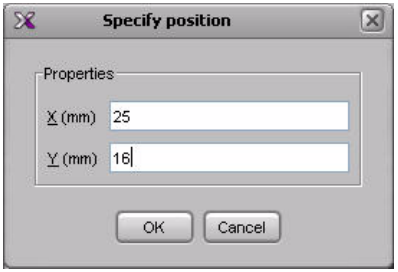
4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Changing the Room Display Position

To change the room display position:

1. Repeat the steps 1, 2 and 3 of the **Selecting Room Display Attributes** section.
2. Select the **Room Display Position** properties on the far right.

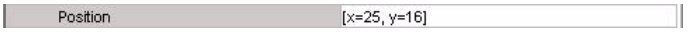
   The Room Display X,Y Position settings window appears.



Room Display Position presets

3. Enter the numeric properties in the **X,Y** fields.
4. Click **OK**

   The entered Room Display Position values appears within the field.



Room Display Position values

5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Overview

- "To create layouts:" on page 113
- "To open an existing XEdit layout:" on page 115
- "To create widget libraries:" on page 116
- "To configure a Video Widget Safe Area Markers:" on page 118
- "To display XDS Data:" on page 119
- "To set up a Layout to use the DVI Background Input:" on page 120
- "To add widgets to a layout:" on page 121
- "To assign channels to widgets:" on page 122
- "To create a composite:" on page 124
- "To resize a Composite:" on page 130
- "To Display Widget Properties using the Region Editor:" on page 131

• “To configure a widget position within the Region Editor” on page 132
• “To configure the dimension within the Region Editor” on page 133
• “To select a UMD Text Font:” on page 135
• “To configure a static UMD text” on page 136
• “To select a Background Image:” on page 136

In this section, you will be able to answer the following questions:

• “What is a widget library?” on page 112
• “What is a composite?” on page 112
• “What is an action?” on page 113
• “What is a trigger?” on page 113
• “What is a layout?” on page 113
• “What is a widget?” on page 112

Checklist

XEdit User Guide Task List

Follow these steps to complete all the tasks required to get started using XEdit:

1. Create a layout. Refer to “Creating a Layout” on page 102.
2. Open an Existing XEdit Layout. Refer to “Opening an Existing XEdit Layout” on page 103.
3. Creating Widget Libraries. Refer to “Creating Widget Libraries” on page 116.
4. Configuring a Video Widget Safe Area Markers. Refer to “Configuring a Video Widget Safe Area Markers” on page 118.
5. Displaying XDS Data. Refer to “Displaying XDS Data” on page 104.
6. Setting up a Layout to use the DVI Background Input. Refer to “Setting up a Layout to use the DVI Background Input” on page 105.
7. Add a Widget to a Layout. “Adding Widgets to a Layout” on page 106
8. Assign a channel to widgets. Refer to “Assigning a Channel to Widgets” on page 107.

9. Create a Composite. Refer to “Creating a Composite” on page 109.
10. Resize a Composite. Refer to “Resizing a Composite” on page 115.
11. Display Widget Properties using the Region Editor. Refer to “Displaying Widget Properties using the Region Editor” on page 115
12. Configure a Widget Position within the Region Editor. Refer to “Configuring a Widget Position within the Region Editor” on page 117
13. Configure the Dimension within the Region Editor. Refer to “Configuring the Dimension within the Region Editor” on page 118.
14. Select a UMD Text Font. Refer to “Selecting a UMD Text Font” on page 119.
15. Configure a Static UMD Text. Refer to “Configuring a Static UMD Text” on page 119.
16. Selecting a Background Image. Refer to “Selecting a Background Image” on page 120.

Key Concepts

Widget

What is a widget?

A widget is a graphical item that is part of a layout. Within the XEdit workflow, widgets - which could also be referred to as components - are consistently called widgets. XEdit provides several types of widgets such as clock, video, audiometer, UMD, timecode and composite.

Widget Library

What is a widget library?

A widget library is a collection of predefined widgets. Widgets from a library can be used to help construct a layout. More than one widget library can exist.

Composite

What is a composite?

A composite is a group of widgets that can be dropped onto a layout. Composites are also referred to as monitors.

Action

What is an action?

An action is an operation automatically performed in response to a specific trigger. Actions are directly associated with widgets and layouts. Examples of an action are a load layout, assign channel, set GPI output, show fullscreen layout.

Trigger

What is a trigger?

A trigger is an event that triggers an action. An example of a trigger could be a double-click on a widget. The action that occurs after completion of the trigger could be that the control panel for the widget displays.

Layout

What is a layout?

A layout is a visual grouping of widgets that appears on a display positioned within a room. A layout shows widgets in a variety of placements and sizes. There are two types of layouts: a room layout and a fullscreen layout.

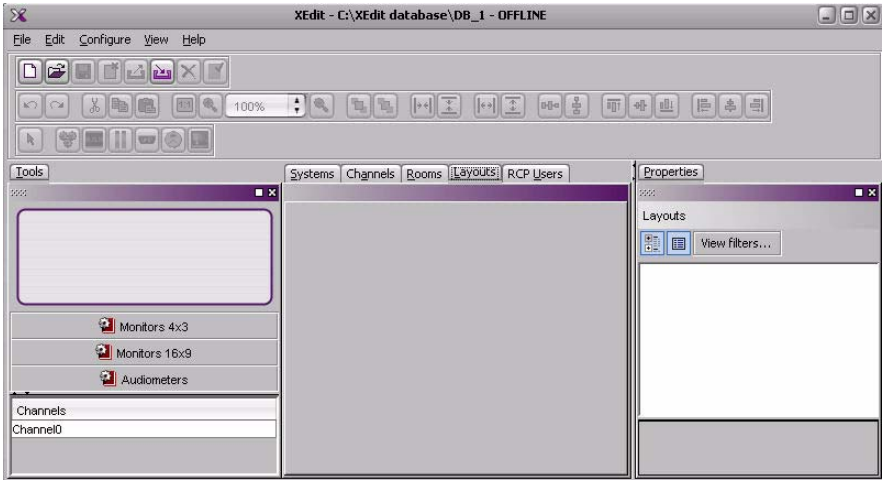
Detailed Directions

Creating a Layout

To create layouts:

1. Select the **Layout** tab from the **XEdit** main window.

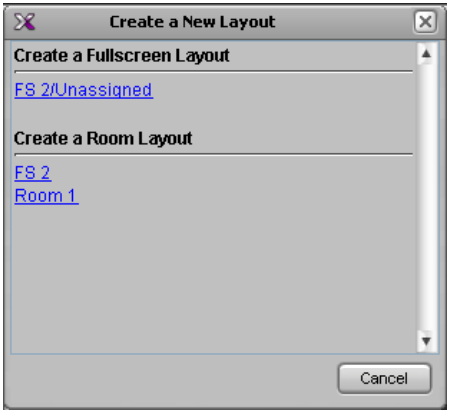
   The Layout tab appears.



XEdit Layout tab

2. From the main menu select **File|New**.

   The Create a New Layout window appear



Create a New Layout window

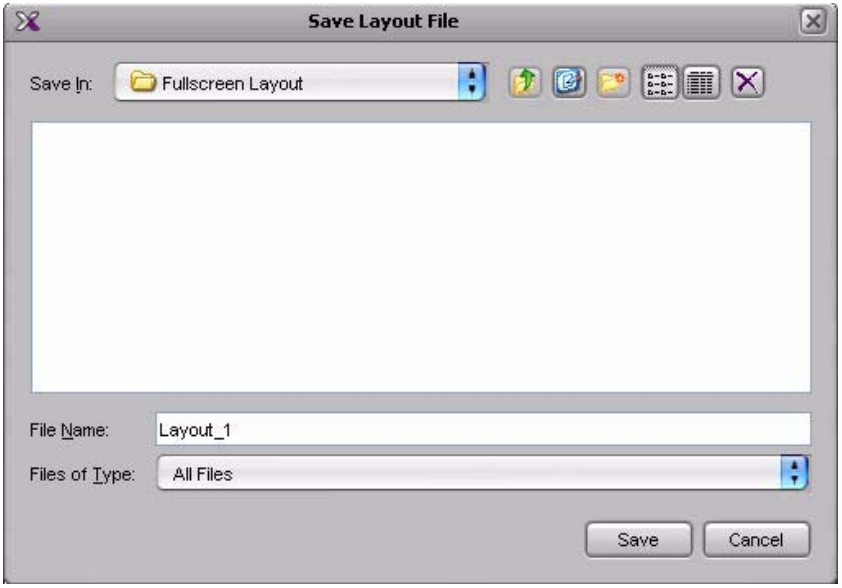
3. Select the **Fullscreen Zone** from under the **Create a Fullscreen Layout** or select the room from under the **Create a Room Layout**.

   The selected New Layout is displayed.

4. Add a minimum of one widget to the layout. Refer to "To add widgets to a layout:" on page 121.

5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

The Save Layout window appears.



Save Layout window

6. Provide a name for the layout.
7. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.
   The Layout is immediately saved as specified.

Opening an Existing XEdit Layout

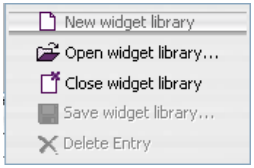
To open an existing XEdit layout:

1. Start the XEdit software. Refer to "To start the XEdit software:" on page 9.
2. Select the **Layouts** tab.
3. Select **File|Open**.
   The Open Layout File window appears.
4. Select the **Layout** to open from the **Open Layout File** window.
5. Click **Open**.
   The selected Layout appears in XEdit.

Creating Widget Libraries

To create widget libraries:

1. Start the XEdit software. Refer to "To start the XEdit software:" on page 9.
2. Select the **Layouts** tab.
3. Right-click on the **Widget Library** panel.
   The right-click menu appears.

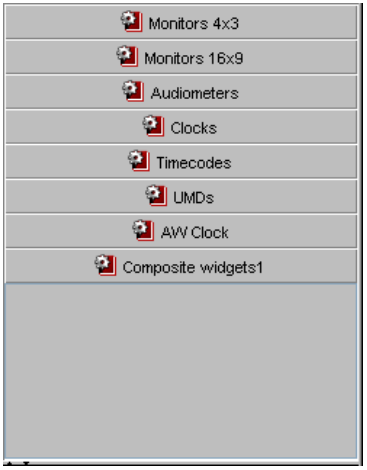


Right-click Widget Library menu.

4. Click on the **New Widget Library**.

Note: The same result can be obtained by selecting the same action from **File|New Display Library**.

The New Composite Widget library appears at the bottom of the Widget library.



New Composite Widgets library

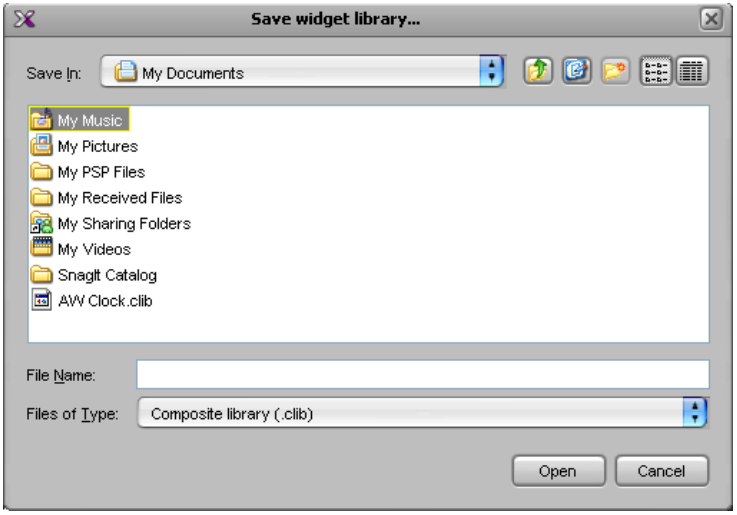
5. Click **File New** or **Open** an existing **Layout.**

6. Draw a widget in the layout, customize if necessary, then drag it (while holding the CTRL key) onto the widget library.

Note: It is not possible to customize a widget once in the library.

7. Right-click in the library pane.
8. Select **Save Widget Library**.

   The Save Widget Library window appears.



Save Widget Library window

9. Type the name of the **Widget** in the **File Name** row of the **Save Widget Library window**.
10. Click **Save**.

    The Widget in the library is now renamed and saved.

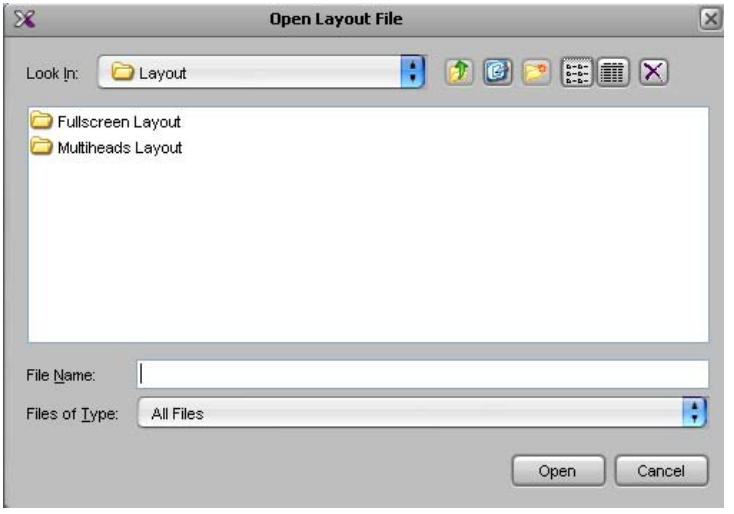
Note: Once the library is saved, right-click in the library pane and select Close widget library. It is possible to re-open the created library by selecting Open Widget Library from the right-click menu within the library. It is also possible to open more than one library at a time.

Configuring a Video Widget Safe Area Markers

To configure a Video Widget Safe Area Markers:

1. Start the XEdit software. Refer to "To start the XEdit software:" on page 9.
2. Select the **Layouts** tab.
3. Select **File|Open**.

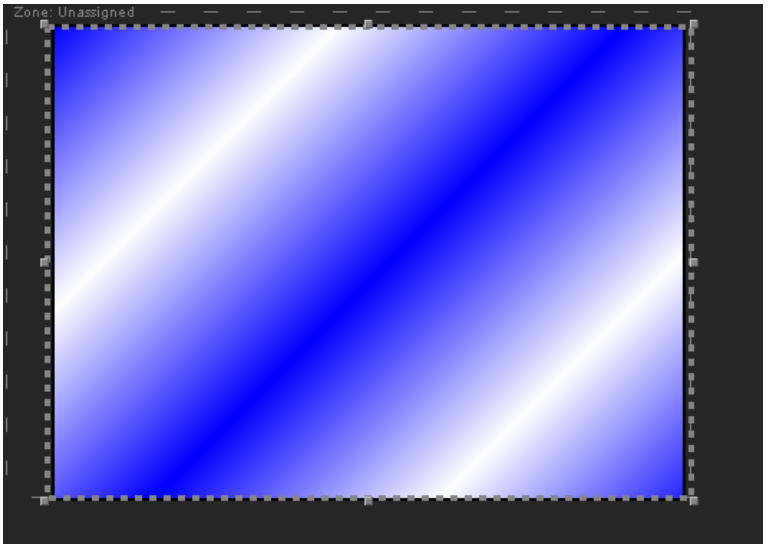
   The Open Layout File window appears.



Open layout File window

4. Select the **Layout** to open from the **Open Layout File** window.
5. Select and click **Open**.
6. Select the **Room** of choice.
7. Select the **Layout** within the **Room.**

   The selected Layout appears.



Room Layout

8. Click on the **Room Layout**.
9. Select the menus of choice located under the **Properties Tooltips Panel** to configure the **Safe Area** of the **Room Layout** located at the far right of the **XEdit** application window.

Displaying XDS Data

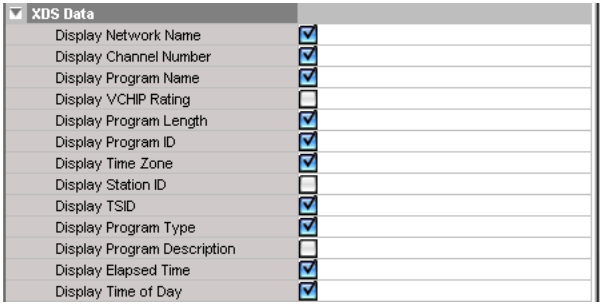
To display XDS Data:

1. Repeat steps 1 to 5 from the **Opening an Existing XEdit Layout** section.
2. Click on the main application toolbar.
3. Click on the DATA widget.
4. Create the **DATA** display within the layout.
   The XDS Data display appears.

XDS Data Display

5. Click on the **Properties** panel.
6. Check or uncheck the required display data.

   The following XDS Data selection is displayed.



XDS Data Display selection

The updated XDS data display selection is displayed within the layout.

Setting up a Layout to use the DVI Background Input

To set up a Layout to use the DVI Background Input:

1. Select the **Layouts** tab from the XEdit main window.

   The Layouts tab appears.
2. Click **Open.**

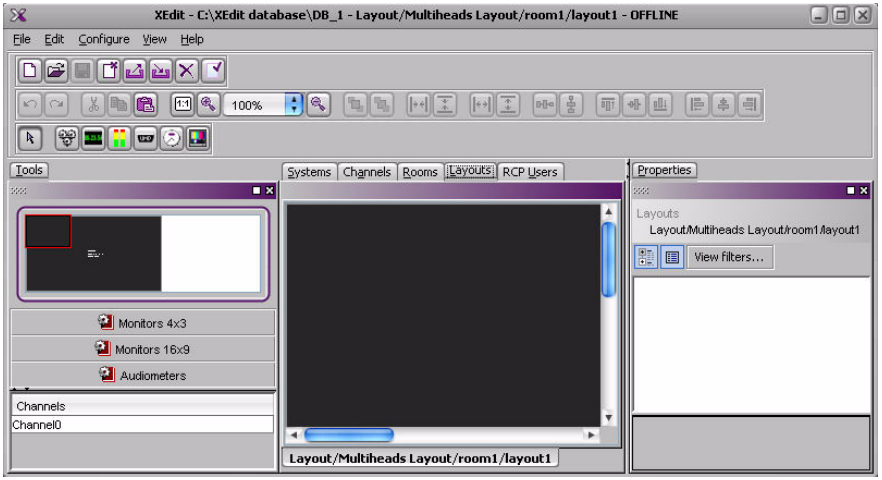
3. Select the **Layout**.
4. Click on the background of the **Layout**.
5. Select the background color settings to the right under **Properties|Apperance|Background Color**.
6. Click on the button.
   The Pick a Color window appears.
7. Click on **RGB**.
8. Set the **Red** to 255, **Green** to 0 and **Blue** to 255.
9. Click **OK**.
10. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Adding Widgets to a Layout

Note: Since the DVI background input cannot be resized, the resolution on the PC that feeds this input must be set to match the Kaleido-X display (head) resolution, otherwise, the DVI background image will be positioned in the center of the display.

To add widgets to a layout:

1. Select the **Layouts** tab from the XEdit main window.
   The Layouts tab appears.



XEdit Layouts tab with open window

2. Select **File|Open** from the main menu.
3. Browse to select an existing **Layout** to open.

   The center pane displays the selected layout.
4. Drag and drop the components from the widget libraries onto the Layout, or create custom sized one by selecting the various Widget buttons in the toolbar.

   All available widget libraries display on the left side of your work area.
5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

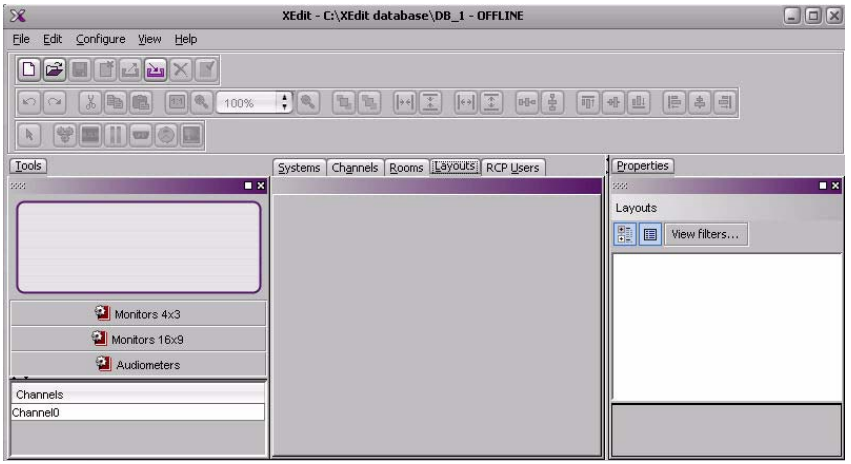
   Changes to the layout are saved.

Assigning a Channel to Widgets

To assign channels to widgets:

1. Select the **Layouts** tab from the **XEdit** main window.

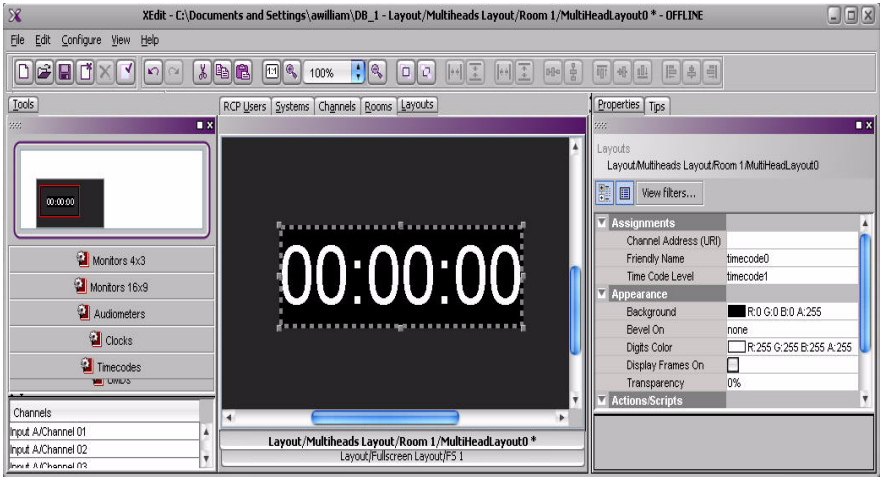
   The **Layouts** tab appears.



XEdit Layouts tab

2. Select **File|Open** from the main menu.
3. Browse to select an existing **Layout** to open.

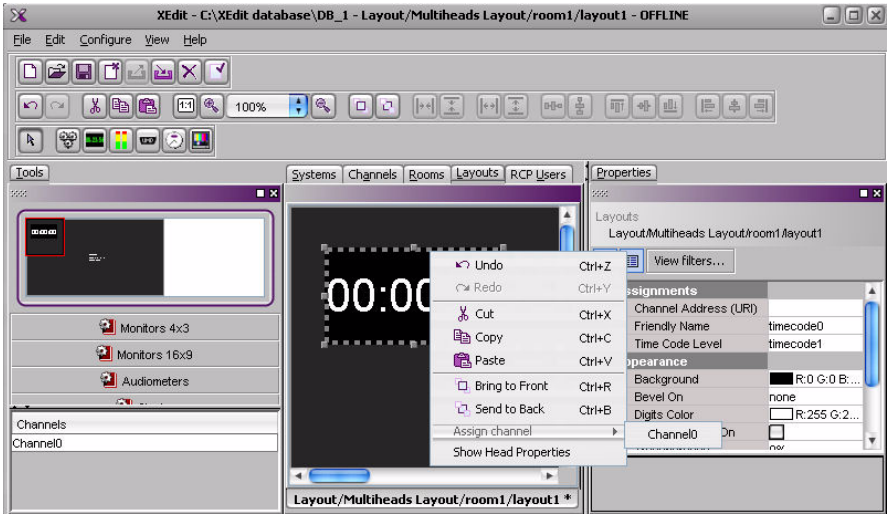
   The center pane displays the selected layout.
4. Select a **Widget** within the displayed **Layout**.



Layout with selected widget

5. Right-Click on the **Widget**.

   A Right-Click menu appears.



Selected widget Right-Click menu with channel list

6. Select **Assign Channel** from the Right-Click menu or drag and drop **Channels** from the tools pane to the widgets.

   A Channel list appears.

7. Select an item from the appearing channel list.

8. Repeat steps 5 thru 7 for all **Widgets** located on the **Layout**.

9. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

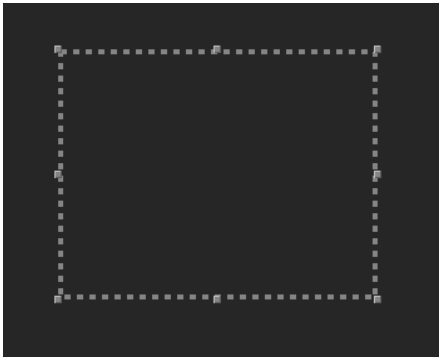
   The active Layout is saved.

Creating a Composite

To create a composite:

1. Open or Create a new **Layout**.

2. Create an empty **Composite** box near the size you want it relative to the display on which it shall appear.

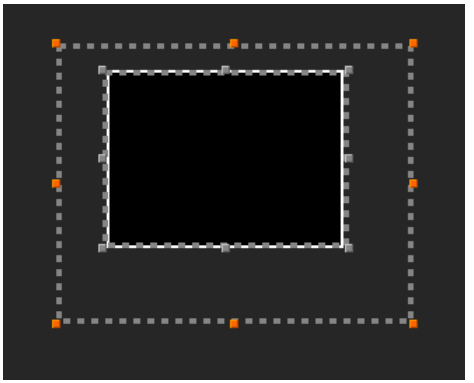


Empty Composite

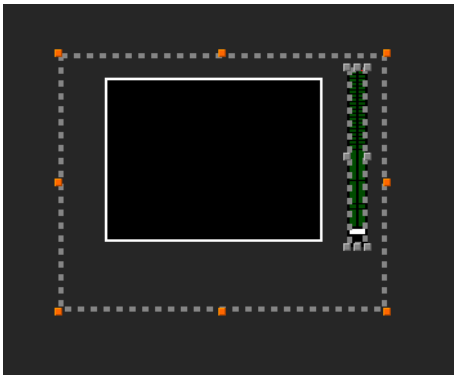
3. Right-Click on the composite and select Unlock from menu to unlock composite.

Unlocked Composite

4. Drop a video widget inside the composite.

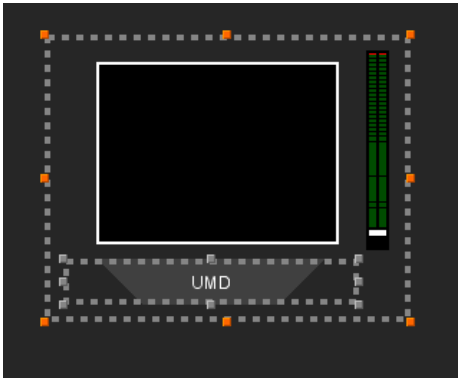


5. Drop an Audiometer widget inside the composite.



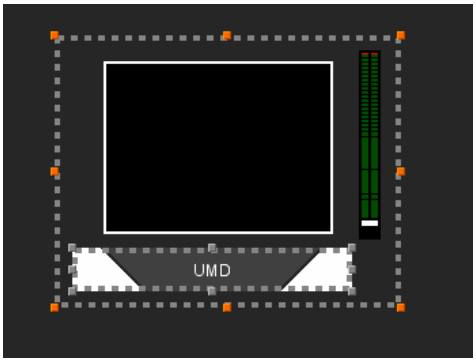
Audiometer Widget within Composite

6. Drop a UMD widget inside the composite.



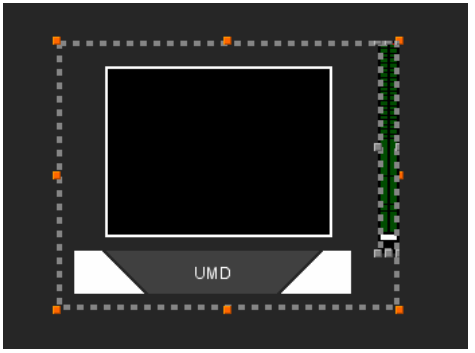
UMD Widget within Composite

7. Select the UMD and from the Properties panel, check **Show Tallies**.



Selected and Displays Tallies

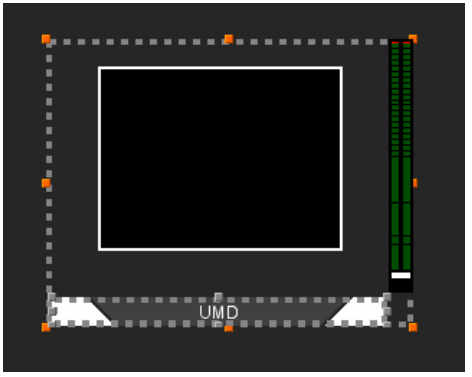
8. Move audiometer to the right-end side of composite by either using the arrow keys or the mouse. To resize the audiometer only vertically or horizontally, press the SHIFT key while using the mouse on the audiometer selection handles.



Re-positioned Audiometer

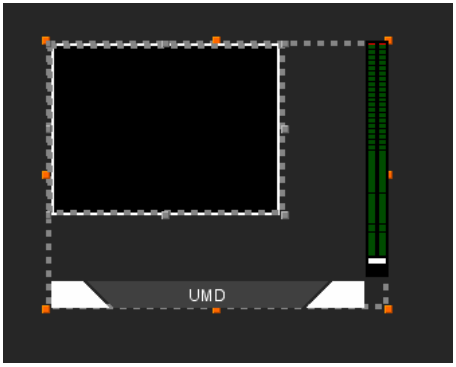
9. Repeat step 7 for UMD.

   In this case the UMD is place on the bottom side of the composite.



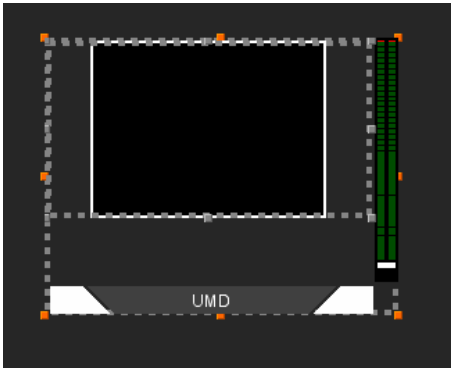
Re-positioned UMD

10. Move the video widget in the top left corner of composite.



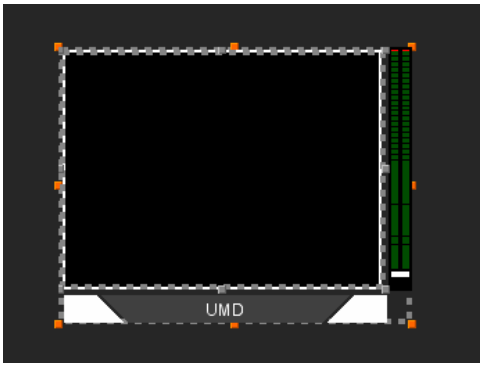
Re-positioned Video Widget

11. By pressing SHIFT key while using the mouse on the video selection right-handle, stretch the video borders horizontally.



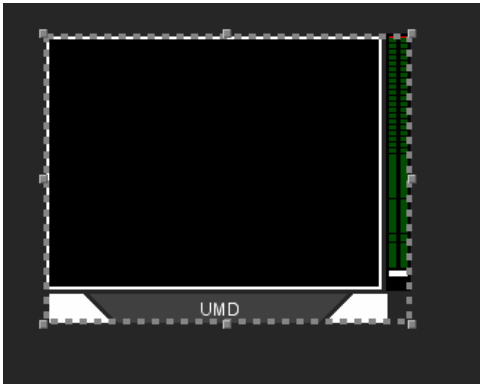
Stretched Video Borders

12. Repeat step 10, but this time stretch the video widget vertically.



Vertically stretched Video Widget

13. Click outside the composite to re-lock it.



Re-locked Composite

14. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Resizing a Composite

To resize a Composite:

1. Left-click on the **Composite** and drag outwards or inwards form any point of its handles.

   The Composite expands or shrinks whilst, the Widgets within it maintain their relative position and size. It is then updated according the type of widget relative to the inside of the composite.

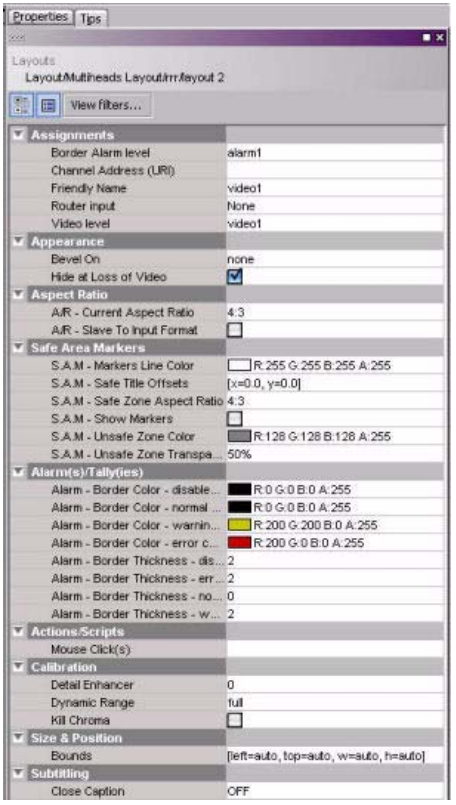
The horizontal Audio Meters and UMD's change in length. A vertical Audio Meter change in height and a Video Widget increases proportionally.

By default, resizing will keep the aspect ratio of the composite. Holding down the shift key while resizing can modify the horizontally or vertically only.

Displaying Widget Properties using the Region Editor

To Display Widget Properties using the Region Editor:

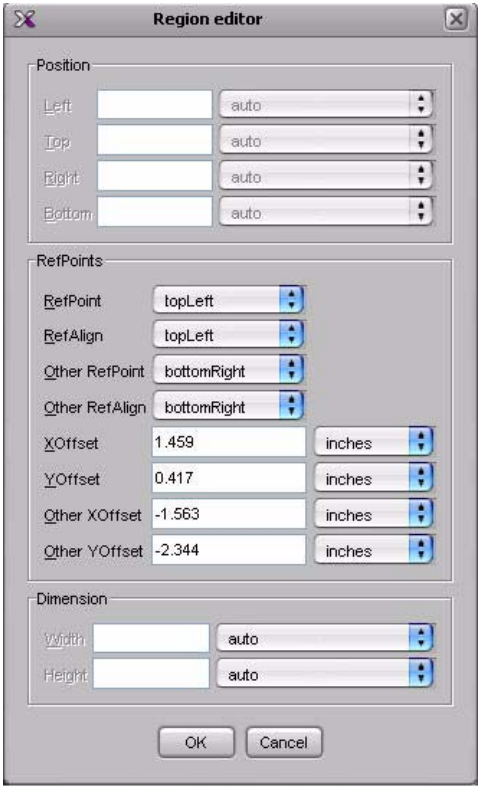
1. Left click on the **Widget**.
2. Select **Properties** tab on the top right of the **XEdit** software.
   The menu options under Properties tab appears.



Composite Menu properties

3. Left-click on the button in the right field under **Size & Position|Bounds.**

   The Region editor appears.



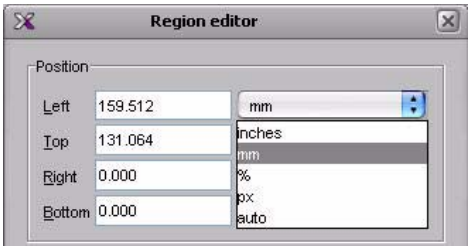
Region editor

Configuring a Widget Position within the Region Editor

To configure a widget position within the Region Editor

1. Repeat the steps 1 and 2 of **Displaying Widget Properties using the Region Editor** section.
2. Select the units of choice from the pull down menu for each of the position.

   The selected units appears



Region Editor selected units

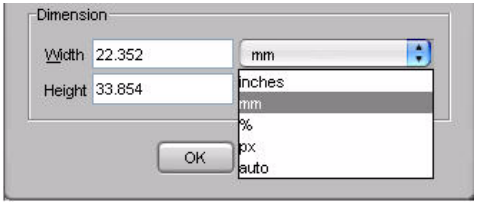
3. Enter the values for the **Left**, **Top**, **Right** and **Bottom** positions**.**
4. Press the **OK** button to keep the modification.
5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Configuring the Dimension within the Region Editor

To configure the dimension within the Region Editor

1. Repeat steps 1 and 2 of the **Displaying Widget Properties using the Region Editor** section.
2. Select the units of choice from the pull down menu for each of the position.

   The selected units appears



Dimension selected units

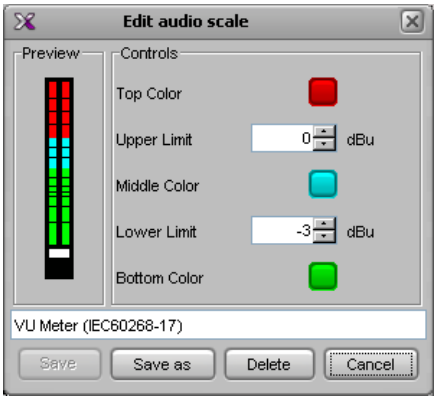
3. Enter the values for the **Width** and **Height.**
4. Press **OK** button to keep modification.
5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Configuring Audio Level Properties

To configure Audio Level Properties

1. Select **Audio Scale** within the **Layout** task tab located under **Properties|Appearance**.
2. Click on the button on the right of **Audio Scale**.

   The Edit Audio Scale window appears.

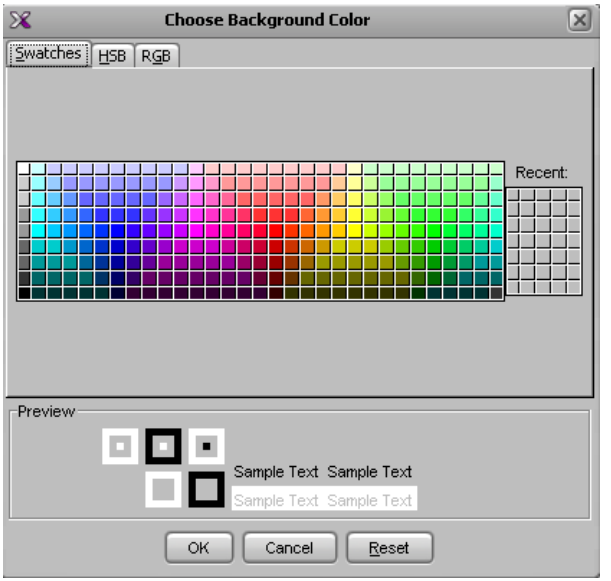


Edit Audio Scale window

3. Select the **Top**, **Middle** and **Bottom Colors** under **Controls,** by clicking on the assigned buttons located at the right text.
4. Set the **Upper** and **Lower Limit** audio thresholds by clicking on the up and down arrows of both until the desired dBu limits are reached.
5. Type the name of the new **Audio Scale** within the text window.
6. Click **Save As**.

   The Choose Background Color window appears for each.
7. Click on either on of the **Top**, **Middle** or **Bottom** Color.

   The Choose Background Color window appears.



Choose Background Color window

8. Click on the color square of choice.

   The color is shown within the preview window below.

9. Click **OK**.

   The selected color is displayed within the Preview column of the Edit Audio Scale window.

Selecting a UMD Text Font

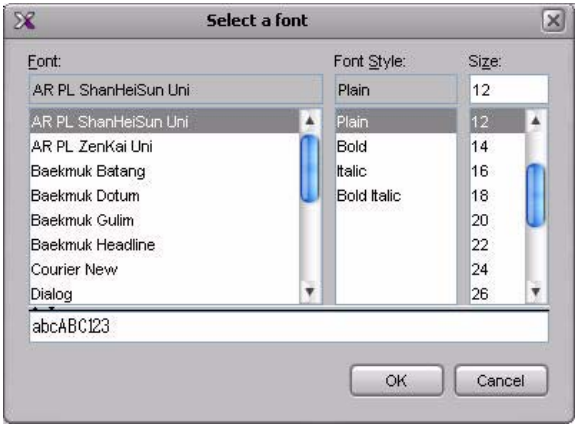
To select a UMD Text Font:

1. Click on the **Layout** tab in the center pane of the **XEdit** application.
2. Click on the **UMD**.

   The UMD properties appears in the properties pane.

3. Click on the button in the **Properties** pane of the **Text Font** menu.

   The Select a font window appears.



Text Font window

4. Choose the **Font, Font Style** and **Size** of choice.
5. Click **OK.**

Configuring a Static UMD Text

To configure a static UMD text

1. Repeat steps 1 to 3 steps from the selecting a **UMD Text Font** instruction set.
2. Select your Keyboard Language of choice from your windows operating system.
3. Double-click on a UMD and type the desired text. (OR choose Option 4 below)
4. Click on the **Channel** tab.
5. Select the static text in the corresponding **Channel** level that is assigned to the **UMD.**
6. Enter the desired text.

   Hence the Unicode characters will be entered using both approach and shall be displayed on the Kaleido-X monitor wall.

Selecting a Background Image

To select a Background Image:

1. Repeat step 1 to 3 from **Creating a Layout** instruction set.

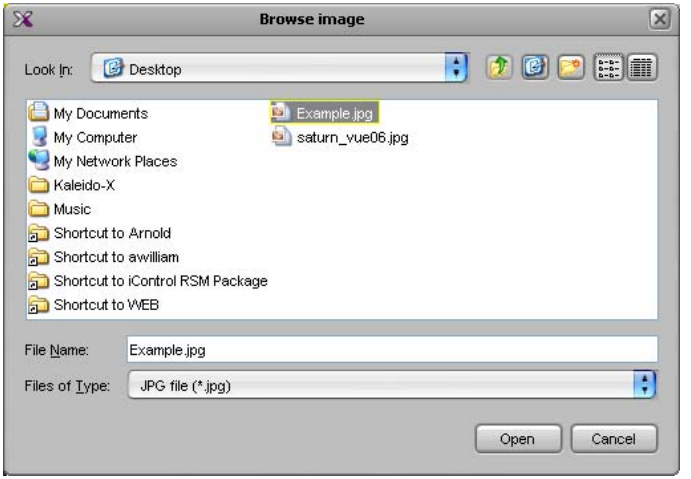
2. Click on the **Layout** background.
3. Click on the **Properties Panel|Appearance |Background Image** on the far right.
4. Click on the button within the Background Image row.

   The Select Image window appears.

Select Image window

5. Click **Open** or **Browse Image** button.

   The Browse Image window appears.



Browse Image window

6. Select the location of the image.
7. Select the Image file.

Note: File size is limited to 100k to assure performance of the runtime operation. Image formats .jpg, .png and .gif files are supported.

8. Click Open.

   The selected image file appears in the **Image Selection** section of the main **Select Image** window.
9. Click on the image in the Image Selection section.

   The **Image Preview** appears.

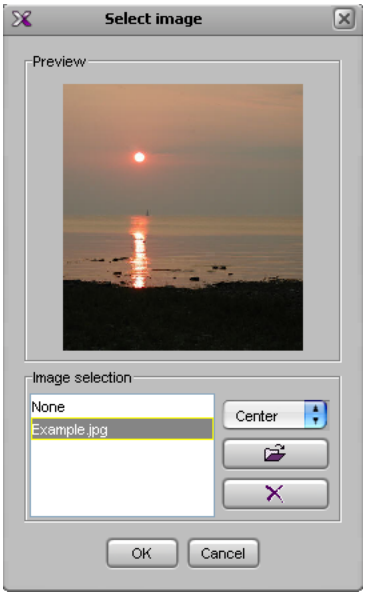


Image Preview

10. Click **OK**.

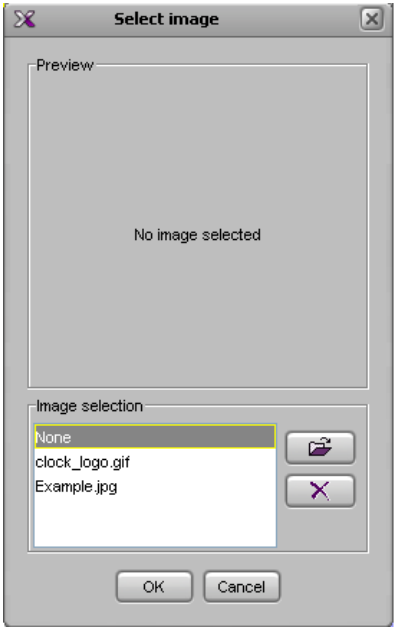
    The image appears in the Layout background.

Inserting a Clock Logo

To insert a Clock Logo:

1. Repeat step 1 to 3 from **Creating a Layout** instruction set.
2. Click on the **Clock.**
3. Click on **Logo** under **Properties|Appearance.**
4. Click on the button on the far right.

   The Select Image window appears.



Clock Logo select window

5. Click **Open** or **Browse Image** button.

   The Browse Image window appears.

Browse Image window

6. Select the location of the **Logo**.
7. Select the **Logo**.

Note: File size is limited to 100k to assure performance of the runtime operation. Image formats .jpg, .png and .gif files are supported.

8. Click **Open**.
   The selected Logo appears in the **Image Selection** section of the main **Select Image** window.
9. Click on the desired **Logo** under **Image Selection.**
   The Logo appears under Preview.
10. Click **OK**.
    The Logo appears in the clock background.

Overview

In this section, you learn to:

• "To export a database:" on page 59
• "To grant Room Access to an RCP2 user:" on page 143
• "To select a Fullscreen Zone and layout assignment instructions:" on page 144
• "To assign an RCP2 Layout Preset Configuration:" on page 144
• "To change the RCP2 user Name and Password:" on page 147
• "To select the Keyboard Language used by an RCP2 user connected to a Kaleido-X:" on page 148
• "To assign an Audio Output to a RCP2 User:" on page 149

In this section, you will be able to answer the following questions:

• "What is an RCP2?" on page 142

Checklist

XEdit Quick Start Task List

Follow these steps to complete all the tasks required to get started using XEdit:

1. Create an RCP2 user. Refer to “Exporting a Database” on page 55.
2. Grant Room access to an RCP2 user. Refer to “Granting Room Access to an RCP2 User” on page 125.
3. Select a Fullscreen Zone and Layout assignment instructions. Refer to “Selecting a Fullscreen Zone and Layout assignment instructions” on page 126.
4. Assign an RCP2 Layout Preset Configuration. Refer to “Assigning an RCP2 Layout Preset Configuration” on page 126.
5. Change the RCP2 User name and Password. Refer to “Changing the RCP2 User Name and Password” on page 128.
6. Select the Keyboard Language. Refer to “Selecting the Keyboard Language” on page 128.
7. Assign an Audio Output to an RCP2 User. Refer to “Assigning Audio Output to an RCP2 User” on page 129

Key Concepts

RCP2

What is an RCP2?

RCP2 is a Remote Control Panel device that allows control of the Kaleido-X frame.

Detailed Directions

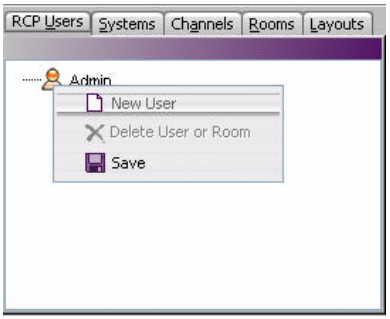
Creating an RCP2 User

To create and RCP2 user:

1. Click on the **RCP User** tab from the **XEdit** center pane.

2. Right-Click on **Admin.**

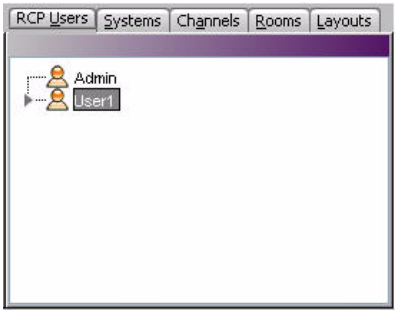
   The Right-Click menu appears.



RCP Right-Click menu

3. Select the **New User.**

   The new user appears.



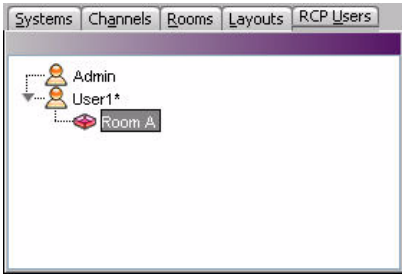
RCP New User

4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Granting Room Access to an RCP2 User

To grant Room Access to an RCP2 user:

1. Click on the **Room** in the left pane.
2. Drag a **Room** from the tools pane onto the user in the center pane.
3. The room becomes assigned and appears under the user.



Assigned Room

4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Selecting a Fullscreen Zone and Layout assignment instructions

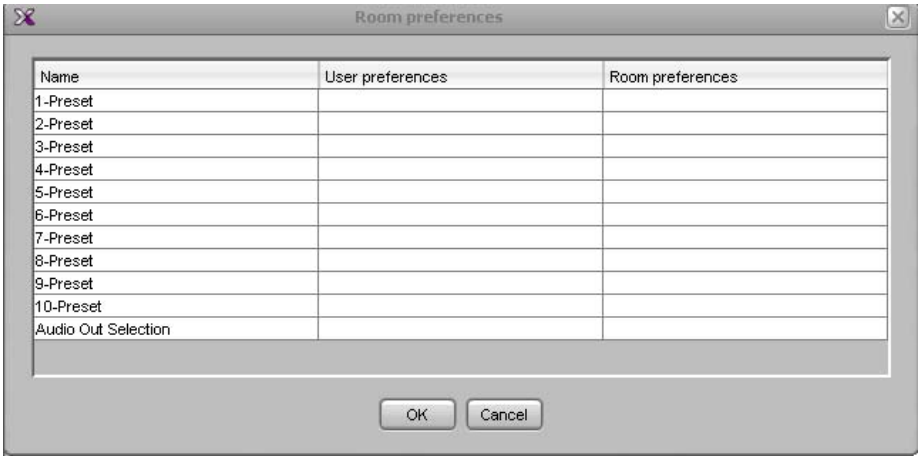
To select a Fullscreen Zone and layout assignment instructions:

1. Click on **RCP Users|Room** in the center pane.
2. Select the **Fullscreen Zone** pull-down arrow on the far right under the **Properties** pane.
3. Select the **Fullscreen Layout** pull-down arrow on the far right under the **Properties** pane.
4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Assigning an RCP2 Layout Preset Configuration

To assign an RCP2 Layout Preset Configuration:

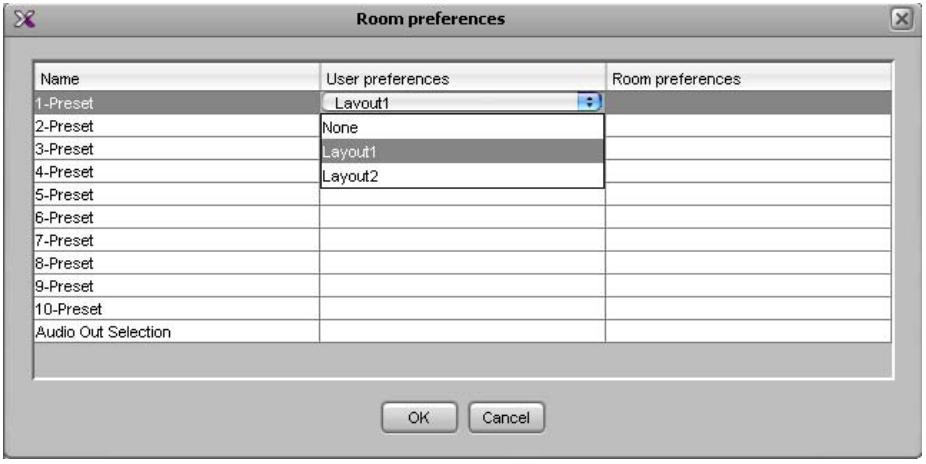
1. Click on **RCP Users** in **XEdit** center pane.
2. Click on the arrow under **Admin** or **User1** to view the assign rooms.
3. Select the **Room Preference** button on the far right under the **Properties** pane.
   The Room Preference window appears.



Room Preferences window

4. Select the **Current User Preference** in the center column that corresponds to the **Preference Name** from the left column.
5. Select the row by clicking on it.
6. Select the **Current User Preference**.

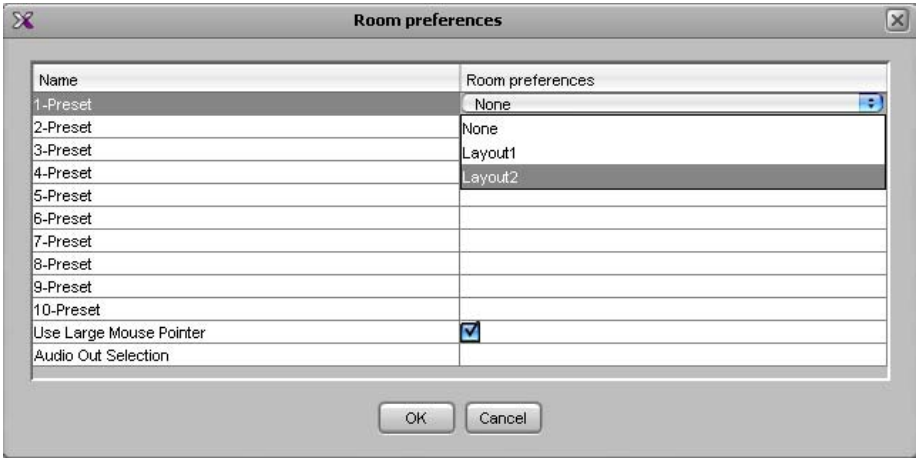
   The selected User Preference appears.



Selected Room Layout Preference

Note: To select the Room Preference Layout on the far right under the Room Preference column follow the steps below.

7. Repeat steps 1 to 3 from **Enabling the Large Mouse Pointer** instruction set.
8. Select the **Preset** row of choice in under the **Room Preferences** window.
9. Click on the right of the selected **Preset** row under the **Room Preferences** column.
   The following Layout appears.

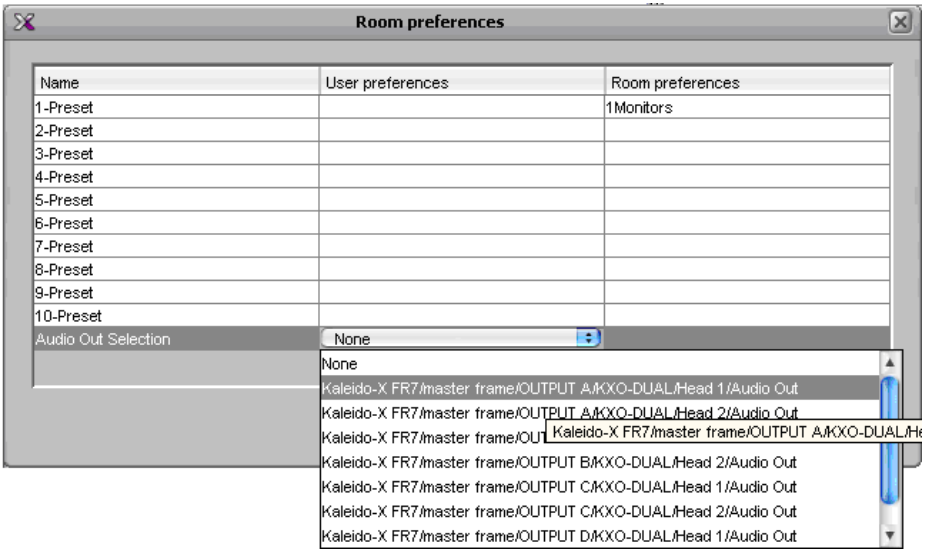


Room Preferences Layout selection

10. Select the Layout of choice.
    The selected Layout is now available under the XEdit Task tab RCP2 Users|User Room|Room Preferences window of the chosen RCP2 Preset.

Note: The following will explain the steps for **Assigning a Kaleido-X Audio Monitoring** for a specific **RCP2 User** within the **Room Preferences** window.

11. Click to select the **Audio Out Selection** from under the User Preferences column located in the center of the Room Preferences window.
    The selection is shown below and appears in the center pane of the User Preferences column.



KXO-Dual Audio Out selection

12. Select the desired **KXO-Dual Audio Out** from the list.
13. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar to save all of the **Room Preferences** configuration.

Changing the RCP2 User Name and Password

To change the RCP2 user Name and Password:

1. Click on **RCP User|Properties|Password** button on the far right.

   The Password Modification window appears.

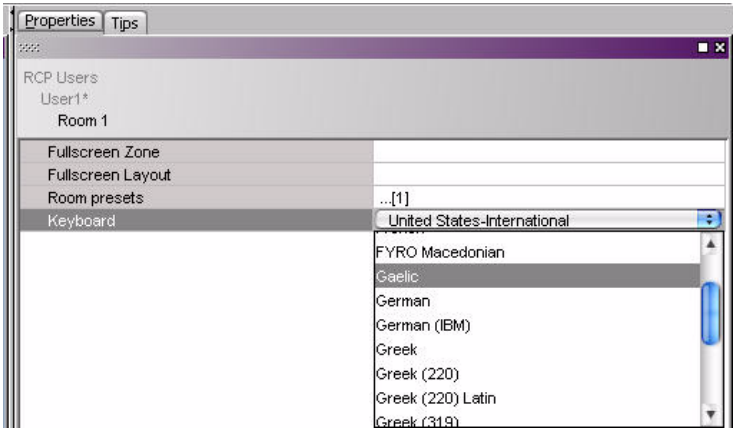
Password Modification window

2. Enter the New Password.
3. Confirm Password by re-entering.
4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Selecting the Keyboard Language

To select the Keyboard Language used by an RCP2 user connected to a Kaleido-X:

1. Click on the **RCP Users** tab from the center pane of the **XEdit** application.
2. Click on a room node under the selected RCP user inside the center pane.
   The room properties appears in the Properties pane.
3. Select the **Keyboard** language of choice in the **Properties** panel by clicking the drop down menu.
   The language list appears.
4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.



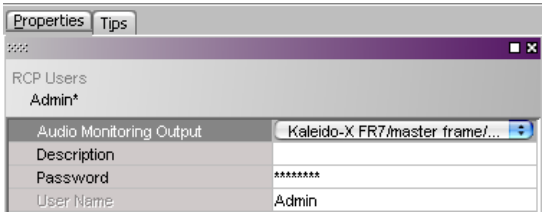
RCP Keyboard language selection

5. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

Assigning Audio Output to an RCP2 User

To assign an Audio Output to a RCP2 User:

1. Repeat Step 1 from the **Selecting the Keyboard Language** instruction set.
2. Click on the **Properties** panel.
3. Select **Audio Monitoring Output** from under the **RCP Users|Admin** title menu.



Audio Monitoring Output selection

4. Click **File|Save** or the **Save** tab in the **XEdit** application toolbar.

4 Administration and Servicing

This chapter explains how to configure all the steps necessary to configure the Kaleido-X network communications.

Summary

Overview *151*
Key Concepts *152*
Detailed Directions *153*

Overview

In this section, you learn to:

• "Configure the Client PC" on page 134

In this section, you will be able to answer the following questions:

• "What is an RCP2?" on page 152
• "What is an ABT?" on page 152
• "What are Back-Ups?" on page 152

• "What are Logs?" on page 152

• "What is a Status?" on page 152

• "What are Versions?" on page 153

Key Concepts

RCP2

What is an RCP2?

The Kaleido-RCP2 is a multi-function remote control panel designed for use with Miranda's Kaleido-X. Ethernet connectivity allows multiple RCP2 users to access multiple Kaleido-X systems, allowing convenient access to the real-time operating features of the Kaleido-X

Audio Bridge Terminal

What is an ABT?

The Audio Bridge Terminal (ABT) is an external audio multiplexer/serializer for the Kaleido-X.

Back-Ups

What are Back-Ups?

Logs

What are Logs?

Logs are a generated zip file within the Kaleido-X system. This generated zip file is created when requested by the user for specific purposes e.g. (Debugging, Frame events).

Status

What is a Status?

A Status refers to a live summary from within XAdmin. This summary is based on the Master Frame system health status of each card.

Versions

What are Versions?

This refers to the various software releases within Kaleido-X system(e.g.XEdit).

Detailed Directions

IP Addressing

Kaleido-X

To configure the Kaleido-X to the TCP/IP network:

1. Assign the **Kaleido-X** frame with a IP address, a network mask, a gateway, and system name.
   Refer to “Configuring the Kaleido-X” on page 6
2. Configure a **Client PC**.
   Refer to “Configuring a Client PC” on page 8
3. Configure the **Kaleido-RCP2**.
   Refer to “Configuring the RCP2” on page 11

RCP2

To configure the RCP2 using an IP address:

1. Connect the RJ-45 ethernet connector to the Kaleido-RCP2.
   The Kaleido-RCP2 becomes powered.

Refer “To configure the IP address of the RCP2, do the following:” on page 13

ABT

To configure the ABT using an IP address:

1. Connect the RJ-45 ethernet connector to the ABT.
   The ABT becomes powered.

2. Refer to "To configure the IP address and other network settings of the ABT, do the following:" on page 16

Configure the Client PC

To configure the client PC using an IP address:

1. Refer "Configuring a Client PC" on page 8

Installing XEdit

To install the XEdit:

1. Refer "To install the XEdit software, do the following:" on page 19

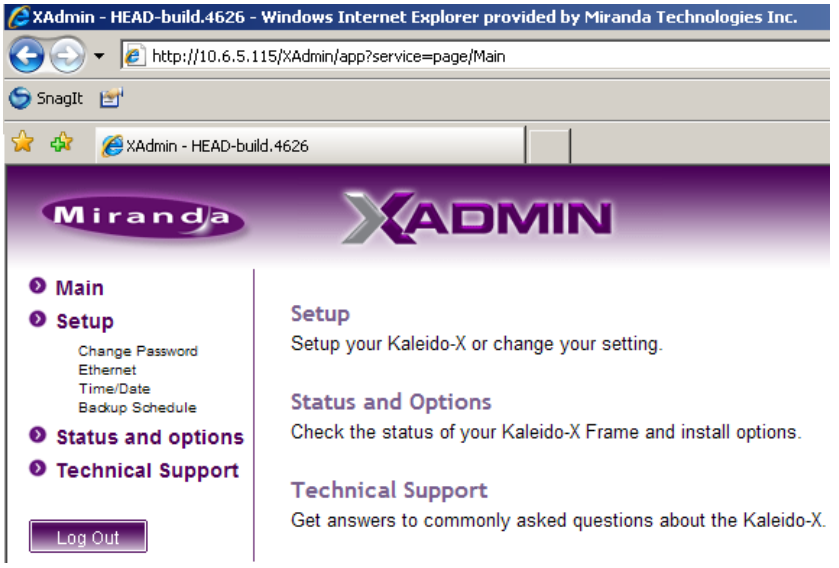
Performing Back-Ups

To perform back-ups:

1. Open a web browser and type the following:
   `http://10.6.5.115/`

Note: This IP address may chance.

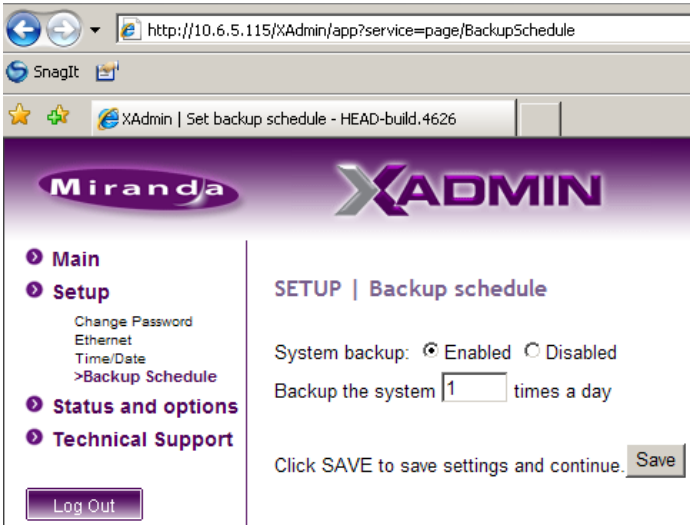
The XAdmin **Main Page** appear.



XAdmin Main Page

2. Select **Backup Schedule**

   The **BackUp Schedule** page appear.



XAdmin BackUp Schedule

3. Select **Enable** from the System backup row.

4. Schedule the backup from the **Backup the system** row.
5. Click **Save** and choose a location to save file or click **Open**.

Managing Hardware and Software Options

Metadata Extraction and Display

To enable the metadata extraction and display option:

1. Repeat Step 1 from **Back-Ups** in the previous section.
2. Select the **Status and Options.**
3. Select the **Enable** or **Disable** option on the Input Cards KXI-16HSV (as required) using the (Embedded Audio Option) and (Metadata Extraction and Display Option)

Note: A key must be purchased for both options to Enable or Disable this function using the Closed Captioning features (CC).

Servicing

Generating a System SnapShot

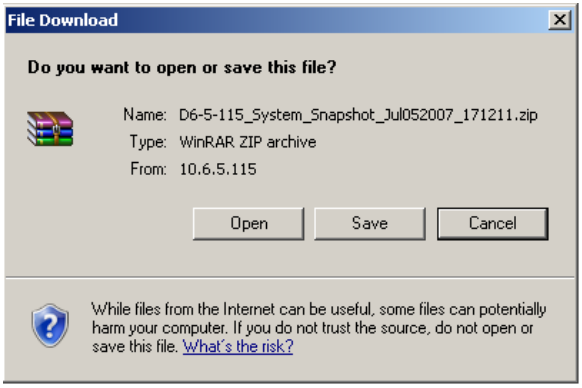
To generate a System SnapShot:

1. Repeat step 1 of **Performing Backups** instruction set.
2. Click on **Technical Support.**
   The Contact Technical Support page appear within the browser.

Contact Technical Support

3. Click on **System Snapshot.**

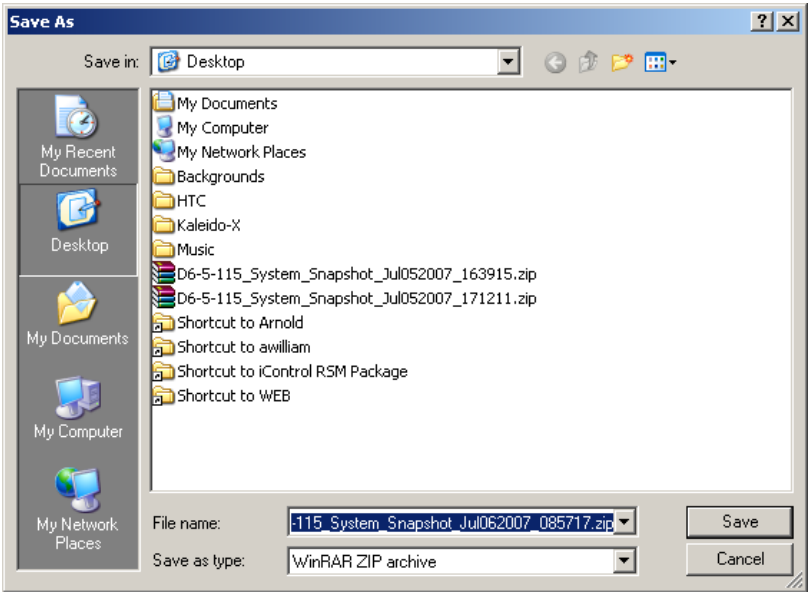
   The system snapshot generation takes a few seconds and the following window appear.


File Download
Do you want to open or save this file?
Name: D6-5-115_System_Snapshot_Jul052007_171211.zip
Type: WinRAR ZIP archive
From: 10.6.5.115
Open
Save
Cancel
While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. What's the risk?

System Snapshot File Download window

4. Click **Save**.

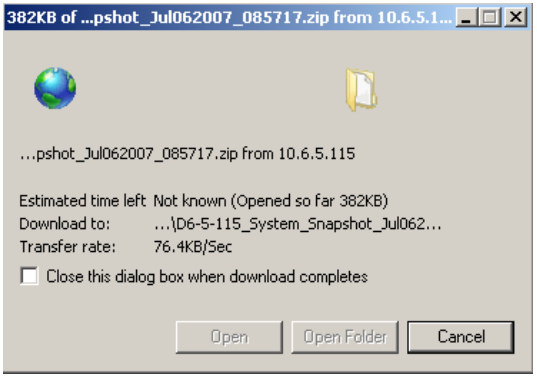
The Save As window appear.



Save As window

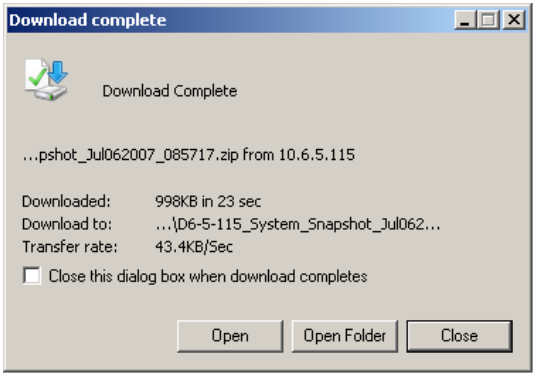
5. Rename the file in the **File Name** row as desired.
6. Select a location to save the file.
7. Click **Save**.

   The download progress proceeds.



Download Progress window

Note: Depending on the file size the download may take a few seconds which is followed by the Download Complete message window.



Download Complete window

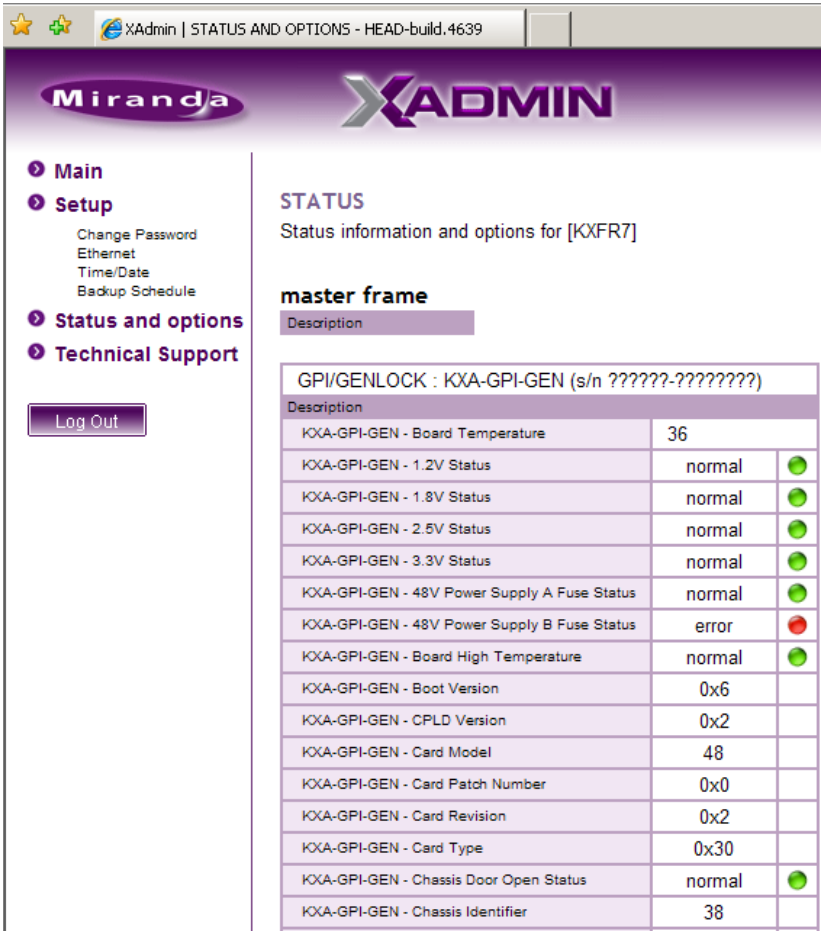
8. Click **Open**, **Open Folder**, or **Close**.

Viewing the Frame Status Information of the Kaleido-X Frame

To view the Status Information of the Kaleido-X frame:

1. Click on **Status and Options** in the **XAdmin** main menu.

   A delay of a few seconds occurs followed by the Status Information window appearing in the browser.



Status information window

The Status Information of the Kaleido-X frame appears under Description detailing the required information.

Viewing Kaleido-X Frame Versions

To view all Kaleido-X versions:

1. Repeat step 1of **Viewing the Frame Status Information of the Kaleido-X frame.**

   The Frame Versions appear at the right of the Description column.

5 Using Kaleido-X Control Protocols

This chapter explains how Kaleido-X can execute commands received via a Gateway, allowing third-party developers and individual users remote access to some Kaleido functions. This document describes the Gateway functionality, and defines the commands that are available.

Summary

Overview *161*
Key Concepts *162*
Detail Directions *162*

Overview

In this section, you learn to:

• "Remote Operation of the Kaleido-Alto/Quad or Kaleido-X" on page 142

In this section, you will be able to answer the following questions:

• "What do I need to complete before configuring iControl ?" on page 144

Key Concepts

Kaleido-X Configuration Prerequisites

To begin the configuration process, there must be an initial connection between the Kaleido-X application.

Detail Directions

Remote Operation of the Kaleido-Alto/Quad or Kaleido-X

For remote operation, the ethernet port of the Kaleido-Alto/Quad and Kaleido-X are continuously available to communicate with a remote computer. The functionality is similar to the Internal Gateway on the Kaleido-K2, but the Kaleido-Alto/Quad and the Kaleido-X port are always "ON" and no configuration is required.

Kaleido Alto/Quad or Kaleido-X can execute XML commands received via TCP/IP (Transmission Control Protocol/Internet Protocol). To send commands, you can use a Terminal Emulation (telnet) program or create your own application using the language of your choice (C++, Visual Basic, Java, . . .). In Section 3 below, the use of "Hyper Terminal" software will be described. Hyper Terminal is a Windows application that is typically installed on every Windows computer, you will find it under the Program - Accessories - Communications menu. This program will communicate with the Kaleido-Alto/Quad or Kaleido-X using communication port 13000.

Gateway Commands

Kaleido-X supports the following commands through the Gateway access. Most of these apply to all Kaleidos, but some only apply to one platform, as indicated in the list. Furthermore, there may be differences in the use or syntax of some commands depending on the platform being used. All of these points are clarified in the list below, and in the detailed description of each command that follows:

Index of Gateway Commands

• Command	• Description	• Page
• openID	• Opens a session with the specified Kaleido	• 145
• closeID	• Closes a previously opened session.	• 146
• getKCurrentLayout	• Gets the name of the current layout	• 147

• Command	• Description	• Page
• setKCurrentLayout	• Loads a specific Layout.	• 147
• getKLayoutList	• Gets the list of available Layouts.	• 148
• setKStatusMessage	• Sets a Gateway Alarm to the specified state.	• 148
• setKChannel	• Associates a Channel to the specified Monitor.	• 149
• setKDynamicText	• Configures the text to display for a Dynamic Text.	• 149
• getKAudioOut	• Gets the identity of the current audio output	• 150
• setKAudioOut	• Selects the audio to be monitored	• 151

Document Conventions

Each command in this document is presented in the following format:

"The Command name" Kaleido types it applies to.

Command description.

The proper command syntax with variables.

Gateway Response - a list of possible answers:

- For a successful execution of the command
- For an unsuccessful execution of the command

Special notes for the command or specific platform.

Gateway Command Descriptions

Please note that the syntax must be exactly replicated when sending a command.

openID

This command opens a session with the specified Kaleido.

Please note that it is not necessary to open a session every time you want to send a command to the Gateway. Since opening a session takes a few seconds, it is recommended that you keep a session open as long as commands need to be sent.

<openID>IP_ADDRESS_0_4_0_0</openID>

On the Kaleido-X:

To open a session without room context:

<openID/>

OR to open a session with a room context:

<openID>ROOM_NAME</openID>

OR to open a session with user privilege validation with MD5 password hash:

<openID>mirandagateway://USERNAME:PASSWORD_MD5_HASH@SYSTEM_NAME/ROOM_NAME</openID>

OR to open a session with user privilege validation without MD5 password hash:

<openID>mirandagateway://USERNAME:CLEAR_PASSWORD @SYSTEM_NAME/ROOM_NAME</openID>

Where:

- IP_ADDRESS is the IP address of your destination Kaleido-K2 or Kaleido-Alto/Quad.
- ROOM_NAME is the room context for the session (see getKCurrentLayout, setKCurrentLayout and getKLayoutList).
- USERNAME: The username that will be used to validate permissions.
- PASSWORD_MD5_HASH: The md5 hash of the user password, encoded in base 64.
    - For information on md5 See http://www.ietf.org/rfc/rfc1321.txt.
    - For information base 64 See RFC 3548.
- CLEAR_PASSWORD: The user password.
- SYSTEM_NAME: The system name as specified in XAdmin

Gateway response:

- <nack/>:
    - o the Gateway was not able to recognize the command OR
    - o the room name was invalid OR
    - o the username does not match the provided password OR
    - o the system name was invalid.
    - o The IP_ADDRESS parameter is wrong.
- <ack/>: the command was recognized by the Gateway.

closeID

This command closes a session with the specified Kaleido

On the Kaleido-K2 or Kaleido-Alto/Quad

<closeID>IP_ADDRESS_0_4_0_0</closeID>

On the Kaleido-X:

<closeID/>

Where:

• IP_ADDRESS is the IP address of the Kaleido-K2 or Kaleido-Alto/Quad.

Gateway response:

• <nack/>: the Gateway was not able to recognize the command.

• <ack/>: the command was recognized by the Gateway.

Note: This command closes the current connection to the client via port 13000, so this connection must be re-established before another session can be opened. If you are using Hyper terminal, it will automatically re-establish the previous connection if you begin typing new commands, but other clients may require you to manually reconnect.

getKCurrentLayout

This command retrieves the name of the current layout.

<getKCurrentLayout/>

Gateway response:

For Alto/Quad:

• <kCurrentLayout>Currentlayout.xml</kCurrentLayout>

For the Kaleido-K2 and Kaleido-X:

• <kCurrentLayout>name="CurrentLayout.kg2"</kCurrentLayout>

• <nack/>: the Gateway was not able to recognize the command.

Where: CurrentLayout.kg2 is the name of the Layout currently in use by the Kaleido-K2 or the Kaleido-X. For Kaleido-Alto/Quad, the layout suffix is .xml instead of .kg2

Note: On the Kaleido-X, the session must have a room context for the command to be used. If the session was opened using the <openID/> command the gateway will return <nack/>.

setKCurrentLayout

This command loads the specified layout.

<setKCurrentLayout>set LayoutToLoad.kg2</setKCurrentLayout>

Where:

- LayoutToLoad is the name of the Layout to load. This Layout must have been exported to the Kaleido prior to executing this command. Note that you can use the getKLayoutList command to retrieve the available layouts before sending this command. For Kaleido-Alto/Quad, the layout suffix is .xml instead of .kg2

Note for Kaleido-X:

If the session does not have a room context, the layout name must be prefixed with the room name and a "/".

- Ex: <setKCurrentLayout>set Room1/Layout1.kg2</setKCurrentLayout>

Gateway response:

- <nack/>: the Gateway was not able to recognize the command or the layout could not be found.
- <ack/>: the command was recognized by the Gateway and the layout has been fully loaded.

getKLayoutList

This command returns the list of Layouts that can be used on the Kaleido.

<getKLayoutList/>

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <kLayoutList> Layout1.kg2 Layout2.kg2 . . . AnAvailableLayout.kg2</kLayoutList>

Note for Kaleido-X:

If the session does not have a room context, the layout names will be prefixed with the room name and a "/". If the session has a room context, only layouts for that room will be returned and the layout names won't be prefixed with the room name (see K2/AQ style response).

- Ex: <kLayoutList>Room1/MAIN.kg2 Room1/BACKUP1.kg2 Room2/MAIN.kg2</kLayoutList>

Where:

- Layout1, Layout2 and AnAvailableLayout are the name of the Layouts that are available on the Kaleido-K2. For Kaleido-Alto/Quad, the layout suffix is .xml instead of .kg2

setKStatusMessage

This command associates an Alarm state with an id. The Kaleido can be configured to listen to this id using an Alarm Monitor, and thus report the state. This is a convenient way of reporting Alarms to the Kaleido.

<setKStatusMessage>set id="AnId" status="STATUS" message="TheMessage"</setKStatusMessage>

Where:

- AnId is the identifier that will receive the new state.
- Note: Kaleido-Alto/Quad will only accept numeric values for this parameter, in the range 0 to 1024. The Kaleido-X does not have this limitation.
- Status is any of the available statuses (OK, DISABLE, WARNING or ERROR).
- The Message is reserved for future use, and will be ignored.

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKChannel

This command is used to assign a Channel to the specified Monitor in the current Layout.

<setKChannel>set channelname="ChannelName" monitor="MonitorNumber" </setKChannel>

Where:

- ChannelName is the name of the Channel to assign to the specified Monitor. On the Kaleido-X this is the full path to the channel. Ex.: /Input A/Channel 1.
- MonitorNumber is the identifier of the Monitor to which the Channel must be assigned. On the Kaleido-X the monitor number must be prefixed with the room name and a "/" if the session does not have a room context. Ex.: /Room1/composite42. The monitor name is available in the XEdit Layout. (Properties:Assignments:Name)

Gateway response:

- <nack/>: the Gateway was not able to recognize the command.
- <ack/>: the command was recognized by the Gateway.

setKDynamicText

This command is used to set the text of a UMD or Text Label Component that is configured to use Dynamic Text. Note that the Service ID for this component must be set to "Gateway" when the layout is created in KEdit/XEdit in order for this command to work.

<setKDynamicText>set address="Address" text="NewText" </setKDynamicText>

Where:

- Address is the configured Text Address of the UMD or Text Label Component.
- Note: Kaleido-Alto/Quad requires a numeric value in the range 0-1024. The Kaleido-X does not have this limitation.

• NewText is the text to display.

Gateway response:

• <nack/>: the Gateway was not able to recognize the command.

• <ack/>: the command was recognized by the Gateway.

getKAudioOut

This command allows the user to get the selected Audio Monitoring Output

• <getKAudioOut/>

Returned value can be any of:

• <nack/>The command was not executed, due to bad spelling or invalid parameter.

• <kAudioOut>DETAILS</kAudioOut>The command was executed

DETAILS will vary depending on the type of audio output detected.

When no audio output is currently being monitored:

• <kAudioOut>Type="NONE"</kAudioOut>.

When the format is STREAMING, the returned value indicates the IP address and the Feed ID of the source using the following syntax:

• <kAudioOut>Type="STREAMING" IP="999.999.999.999" FeedID="XX"</kAudioOut>

Where:

999.999.999.999is the IP of the machine from where the stream occurs.

XX is the identifier of the feed to use.

When the format is an AUDIO CARD, the returned value indicates which audio card input is being monitored:

• <kAudioOut> Type="AUDIOCARD" Input="999"</kAudioOut>

Where:

999 indicates the input from the card.

When the format is EMBEDDED, the returned value will contain the video input, the group and the AES used. The syntax will be:

• <kAudioOut>Type="EMBEDDED" Input="AAA" Group="BB" AES="X"</kAudioOut>

Where:

AAA indicates the video input.

BB indicates the group. Valid values range from 1 to 4.

X indicates the AES. Valid value can be either 1 or 2.

- **setKAudioOut**

- The user can select the audio to be monitored by using this Gateway command. The syntax of the command will differ if the user indicates to monitor audio coming from a stream (Note - streaming sources are not supported by Kaleido Alto/Quad), from an audio card, from an embedded source or no audio at all. In general, you can select any audio source to be monitored, even if this source is not represented in an audiometer on the current layout.

<setKAudioOut>DETAILS</setKAudioOut>

DETAILS will differ depending on the type of audio source being selected for monitoring, as shown below.

Gateway response:

- <ack/>The command was correctly interpreted.

- <nack/>The command was not executed, due to bad spelling or invalid parameter.

DETAILS:

To select a STREAMING source (Kaleido-K2 only), format the command as follows:

- <setKAudioOut>set Type="STREAMING" IP="999.999.999.999" FeedID="XX"</setKAudioOut>

Where:

999.999.999.999 is the IP of the machine from where the stream occurs.

XX is the identifier of the feed to use.

To select an AUDIO CARD source, format the command as follows:

- <setKAudioOut>set Type="AUDIOCARD" Input="999"</setKAudioOut>

Where:

- 999 indicates the input from the card.

To select an EMBEDDED source, format the command as follows:

- <setKAudioOut>set Type="EMBEDDED" Input="AAA" Group="BB" AES="X"</setKAudioOut>

Where:

- AAA indicates the video input.

- BB indicates the group. Valid values range from 1 to 4.

- X indicates the AES. Valid value can be either 1 or 2.

To STOP audio monitoring and MUTE the audio output:

• <setKAudioOut>set Type="NONE"</setKAudioOut>

You may select any audio for monitoring, independent of whether it is being metered in the current Layout, with the exception that STREAMING sources must be part of the current layout.

• If the source is included in the layout, the meter assigned to it will be highlighted.

• If the source is not included in the layout, the sound will be routed to the audio monitors, but there will be no indication in the layout of the source..

6 Using the Serial to TCP/IP Dispatcher

Welcome to the Serial-to-TCP Dispatcher Protocol.

Summary

About the Serial-to-TCP Dispatcher Protocol *167*
Using the Serial to TCP/IP Dispatcher *167*

About the Serial-to-TCP Dispatcher Protocol

The Serial-to-TCP Dispatcher Protocol is a piece of software designed to run on a separate PC or embedded into a product (such as the KX) in order to act as a bridge between a serial device and the TCP/IP network.

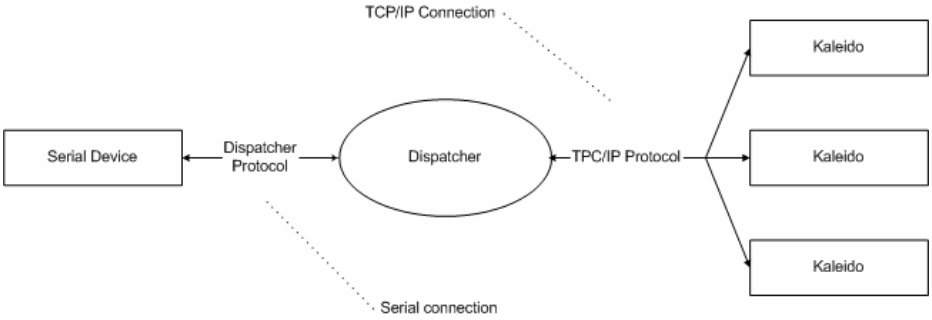


Figure:6 Functional model

Description

This section presents the feature and list the requirements needed to make it understandable to the end-user.

The purpose of the Dispatcher is to act as communication bridge between a serial device and multiple TCP/IP devices.

Description of Data Flow

FR001	The Dispatcher expect the data coming from the serial port to respect the format defined in Figure 4 - Dispatcher Protocol
FR002	In normal circumstances (see Figure 4 - Dispatcher Flow char), the Dispatcher extracts the Message section of the Data packet (shown in Figure 4 - Dispatcher Protocol) received on the serial port, it then decode it to a TCP/IP segment and finally sends it to the IP address/TCP port number that matches the Link ID.
FR003	In normal circumstances (see Figure 3 - Dispatcher Flow char), the Dispatcher extracts the data contain in a TCP/IP segment it receives from an opened TCP/IP connection; it then encapsulate it to a Serial data packet (see Figure 4 - Dispatcher Protocol) and finally forwards it onto the Serial connection.

Normal Case

The normal flow of data from a serial device to multiple TCP/IP devices.

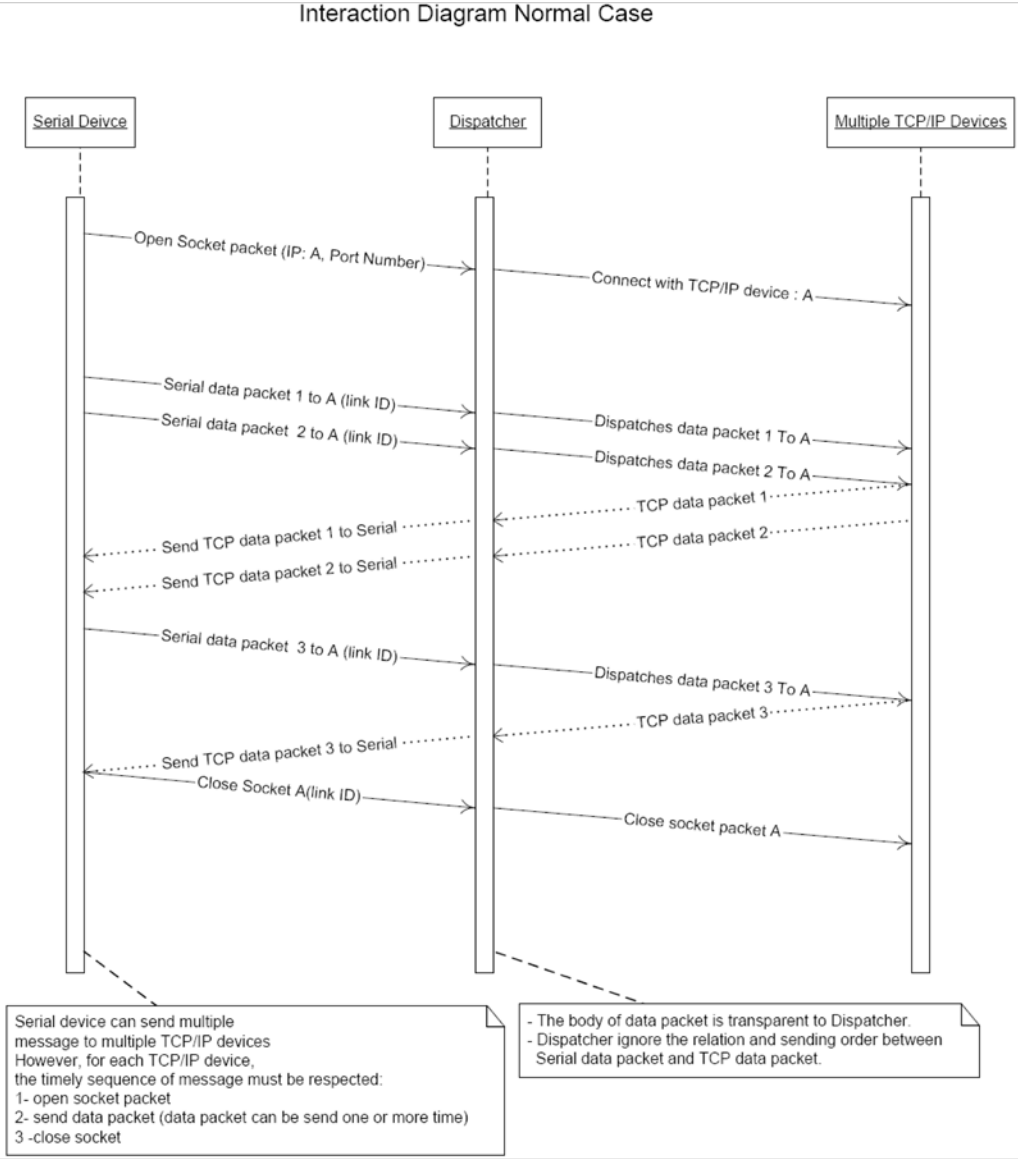

Interaction Diagram Normal Case
Serial Deivce
Dispatcher
Multiple TCP/IP Devices
Open Socket packet (IP: A, Port Number)
Connect with TCP/IP device : A
Serial data packet 1 to A (link ID)
Serial data packet 2 to A (link ID)
Dispatches data packet 1 To A
Dispatches data packet 2 To A
TCP data packet 1
TCP data packet 2
Send TCP data packet 1 to Serial
Send TCP data packet 2 to Serial
Serial data packet 3 to A (link ID)
Dispatches data packet 3 To A
TCP data packet 3
Send TCP data packet 3 to Serial
Close Socket A(link ID)
Close socket packet A
Serial device can send multiple
message to multiple TCP/IP devices
However, for each TCP/IP device,
the timely sequence of message must be respected:
1- open socket packet
2- send data packet (data packet can be send one or more time)
3 -close socket
- The body of data packet is transparent to Dispatcher.
- Dispatcher ignore the relation and sending order between
Serial data packet and TCP data packet.

Figure:7 Interaction diagram

Exception Case

The Dispatcher protocol does not return any error message. Invalid packets are discarded silently. The serial device that uses the Dispatcher must implements its own mechanism to ensure that data is successfully transmitted.

Figure:8 Dispatcher Flowchart

Interface

This section presents the interface used to manage this new feature.

Serial Interface

Figure 4 shows the format of the packets received by the Dispatcher over its serial interface (i.e. Open socket packet, Data packet and Close socket packet) as well as the format of the packets sent by the Dispatcher onto its serial interface (i.e. Data packet from TCP/IP).

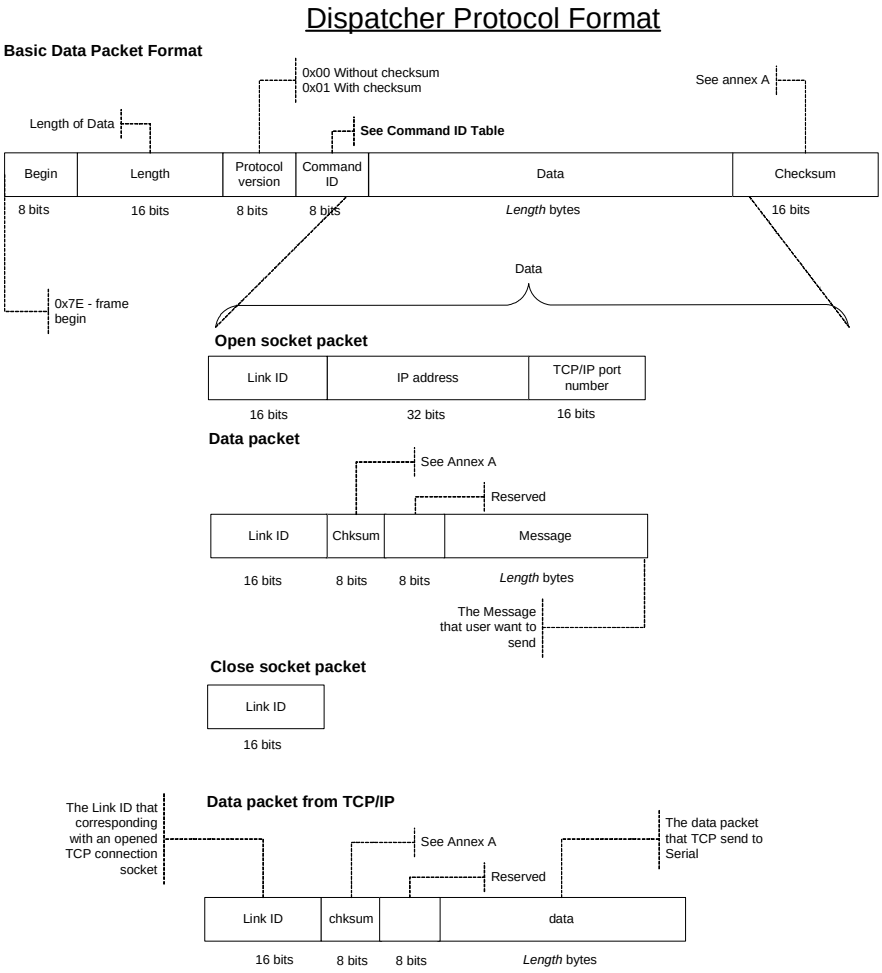


Figure:9 Dispatcher Protocol

Command ID Value Table

This section presents the valid values for the Command ID field presented earlier.

Command ID value	Description
0x01	Open Socket Command
0x02	Send Data Command
0x03	Close Socket Command
0x04	Data from TCP device

Serialization Convention

The Dispatcher expects the data coming from the serial port respect the Big Endian bits ordering and network byte order.

Annex A - Checksums

The checksum algorithm used is the IP checksum specified in RFC1071 (http://www.faqs.org/rfcs/rfc1071.html). It can be used in two modes 8 and 16 bit.

8 Bit Checksum

The 8 bit checksum is used in the data packet as a header checksum. It is used to verify that the length field was not corrupt.

The checksum should include the 16 bit length field, the 8 bit protocol field and the 8 bit command field. The checksum must be calculated as described in RFC1071 but using single byte complement 1's sum instead of byte pair.

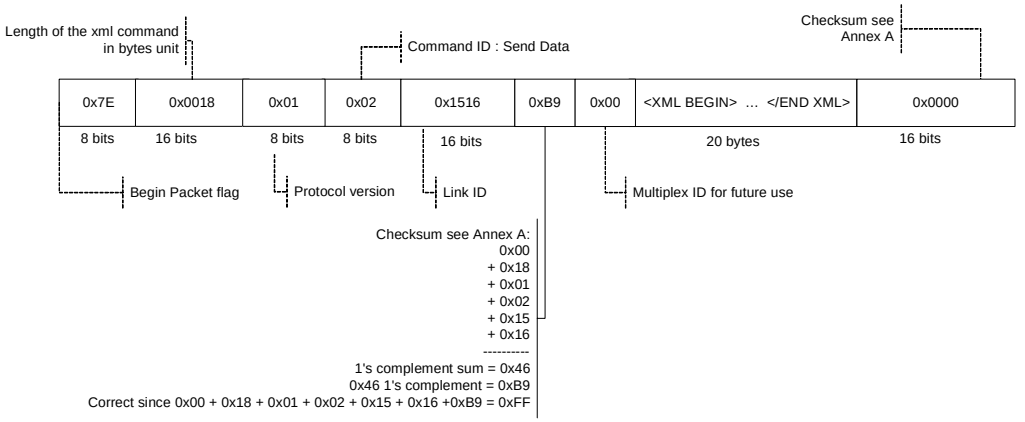


Figure:10 Annex A - Checksums

Annex B - Use Case Example

This section presents a Serial-To-TCP Dispatcher Protocol use case example.

Ross Interaction Use Case Diagrams

The following sections present a use case in which the Dispatcher is used with a Ross Production switcher in order to send XML commands from to a Miranda Kaleido Multiimage system. Each subsection focuses on a specific Dispatcher packet.

Ross Open Socket Message

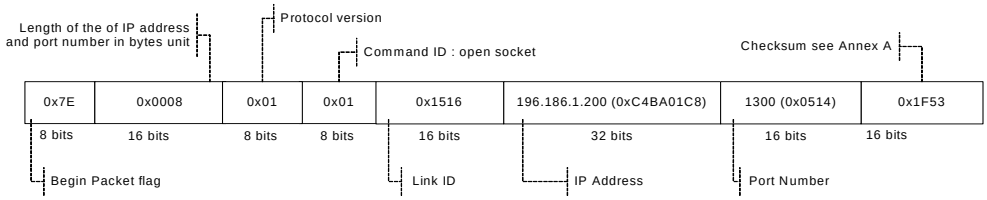


Figure:11 Ross Switcher Open socket example

Ross Send Data Packet Message

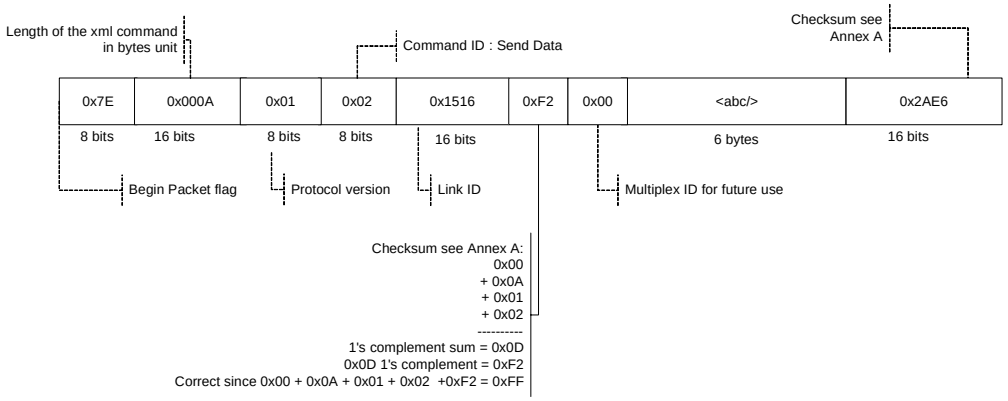


Figure:12 Ross Example Send Data packet to TCP

Ross Data from Kaleido

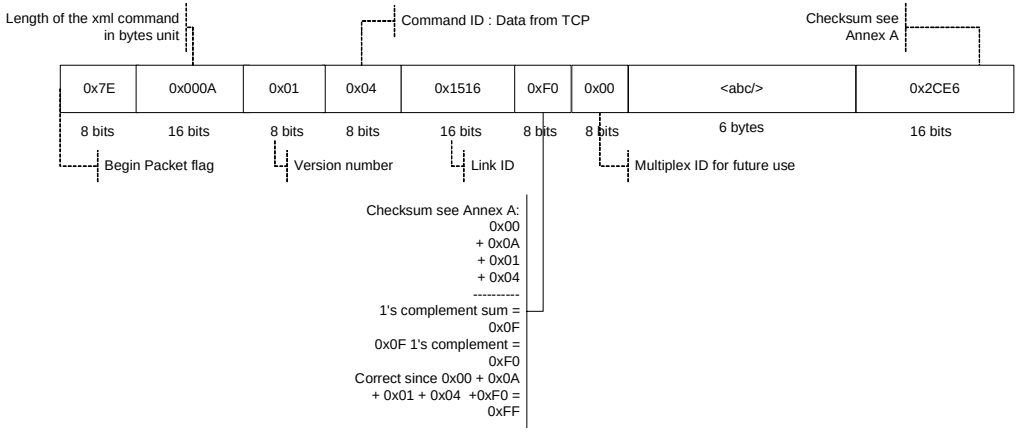


Figure:13 Ross Example Data packet from TCP

Ross Close Socket Message

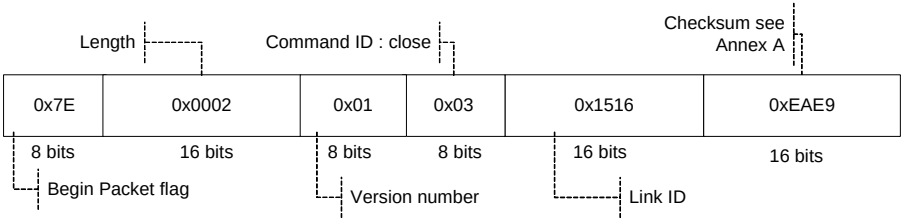


Figure:14 Ross Example Close Message

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